

2006-2009 Large Pelagics Intercept Survey

Statement of Work

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1. Background

The National Marine Fisheries Service (NMFS) is responsible for monitoring and managing U.S. marine fisheries resources. Large pelagic species (e.g., tunas, billfish, swordfish, and sharks) which are caught in offshore oceanic waters are of particular interest to NMFS as these species support socially and economically important recreational and commercial fisheries. NMFS closely monitors directed effort and catch rates for these highly migratory species, and adjusts management measures as needed to maintain stocks and the fisheries that depend on them.

Since 1992, the National Marine Fisheries Service has administered the Large Pelagics Survey (LPS) to collect information about the recreational fishery directed at large pelagic species (e.g., tunas, billfishes, swordfish, sharks, wahoo, dolphinfish, and amberjack) in the offshore waters from Maine through Virginia. Angler participation in the LPS is mandatory and is a condition of obtaining a National Marine Fisheries Service Highly Migratory Species (HMS) permit. The authority to collect LPS data comes from the Atlantic Tunas Convention Act and the Magnuson-Stevens Fishery Conservation and Management Act. The collection of catch and effort information on large pelagics also fulfills U.S. obligations to the International Commission for the Conservation of Atlantic Tunas (ICCAT).

Because large pelagic species are only sought on a relatively small proportion of the total marine recreational angler fishing trips made in the Northeast Region, the fishing effort directed at such species, and the resulting angler catches are generally not estimated very precisely by the Agency's Marine Recreational Fisheries Statistics Survey (MRFSS). Therefore, the LPS was designed as a specialized survey that would focus specifically on the recreational fishery directed at large pelagic species. This specialization has allowed higher levels of sampling needed to provide more precise estimates of pelagic fishing effort and catches of large pelagic species.

The LPS includes two independent, yet complementary, types of surveys which provide the effort and average catch per trip estimates needed to estimate total catch by species. The Large Pelagics Intercept Survey (LPIS) is a dockside survey of fishing access sites, primarily designed to collect catch data from private and charterboat captains who have just completed fishing trips directed at large pelagic species. LPIS data are used to estimate the average recreational catch per large pelagic boat trip by species. The Large Pelagics Telephone Survey (LPTS) collects data used to estimate the total number of boat trips on which anglers fished with rod and reel or handline for large pelagic species.

The Large Pelagics Telephone Survey work is conducted under a different contract and is not part of this Statement of Work (SOW). The primary work ordered under this SOW is conduct of the Large Pelagics Intercept Survey from Maine through Virginia. This SOW also includes the following options which may or may not be exercised depending on NMFS priorities and budgetary considerations:

- **Large Pelagics Biological Survey (LPBS)** – collection of additional length and weight information for bluefin tuna and other managed large pelagic species.
- **Large Pelagics Headboat Survey (LPHS)** - interviewers join half-day, full-day, or multi-day trips on-board party/head boats targeting large pelagic species to collect information concerning the vessel's fishing effort and catch.
- **Catch Card Census Program** – attempted census of all landed bluefin tuna, marlin and/or other large pelagics species through angler submitted catch cards (piloted in Virginia).
- **Large Pelagics Intercept Survey Southeast Region** – extension of the LPIS, LPBS and/or LPHS to one or more states from North Carolina through Texas.

These options and the LPIS are described in more detail below. Any questions or problems not covered in this statement of work should be directed to the National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Science and Technology, Fisheries Statistics Division (F/ST1) through the Contract Officer.

2. Large Pelagics Intercept Survey

The Large Pelagic Intercept Survey (LPIS) shall be conducted for the purpose of collecting data needed to estimate the average catches of different large pelagic species per boat trip on a monthly basis. Catches of Atlantic bluefin tuna shall be recorded by specific size categories and catches of other large pelagic fishes shall be recorded by species. The LPIS will cover fishing for large pelagic species in the Northeast Region (Virginia through Maine). In addition, NMFS may choose to extend the LPIS to cover all, or a part of, the Southeast Region (Texas through North Carolina).

The Contractor shall collect fishing information by intercepting and interviewing charter boat and private boat operators who have just completed fishing trips targeting large pelagic species. The Contractor shall update as necessary an existing list of appropriate sites for dockside interviewing. Sites are differentially weighted for sampling in relation to their usage by boats that fish for large pelagic fishes. The Contractor shall follow specific procedures to group sites into clusters that can be selected for interviewing assignments. Once sites have been appropriately clustered, the Contractor shall randomly select site clusters in relation to their known fishing activity. Site clusters shall be weighted by their total measured large pelagic species fishing activity, such that clusters with greater activity get sampled more frequently than clusters with lesser activity. Site clusters shall be selected independently for each month and day type (weekend or weekday) stratum, and dates for interviewing assignments shall be randomly selected within each temporal stratum. Interviewing assignments shall be distributed among geographic and temporal strata to assure the attainment of both minimum interviewing goals and distributions of interviews that are representative of fishing activity.

Specific procedures shall be followed to intercept and interview captains of returning boats at assigned sites. The questionnaire to be administered during interviews shall be developed by the

Contractor in coordination with NMFS. This form should be tailored to facilitate rapid editing and entry of recorded data. The questionnaire used for the 2005 LPIS is included as Appendix A.

The data obtained from respondents shall be checked for errors and entered into SAS databases that are formatted in accordance with NMFS' specifications. Coding and data entry errors shall be corrected and error-free data shall be delivered according to the specified delivery schedule.

The Contractor shall be responsible for conducting the following general tasks:

- Hiring, training, deployment, and supervision of interviewers and field supervisors;
- Survey administration, including the determination of appropriate sampling goals, the proper selection of specific locations and dates for interviewing assignments to assure representative sampling, the determination of representative sampling distributions, the determination of the numbers of assignments needed to achieve sampling quotas and distribution goals, the appropriate deployment of interviewers to cover all selected interviewing assignments, the tracking of success in completing interviewing assignments, and the monitoring of success in reaching the sampling quotas and distribution goals;
- Proper conduct of dockside interviews with boat captains, anglers, and/or crew members to collect specified data elements;
- Validation of 10% of all dockside interviews through remote monitoring or through independent follow-up contacts with interviewees;
- Quality control Field Supervisor visits of 5% of all interviewer assignments;
- Checking and editing of every data element to correct coding or data-entry errors;
- Preparation and delivery of summary tables for use in reviewing and evaluating the sampling results and the collected data;
- Delivery of properly formatted, error-free data sets with all specified variables according to a specified delivery schedule; and
- Review of survey results and preparation of proposals to improve survey procedures.

The Contractor shall be responsible for collecting all data under this contract, as well as conducting all data entry and editing according to NMFS' specifications. The Contractor's responsibility shall include coordination of all survey tasks with NMFS, as well as with other entities participating in recreational fishing data collection programs, such as states or other contractors. Any re-allocation decisions will be made by NMFS in consultation with the Contractor. All procedures, questionnaires and forms must be approved by NMFS prior to implementation. Specific requirements are addressed below.

2.1 Sampling Tasks

The objective for sampling shall be to identify sites where boats return, randomly select a sample of site/date combinations for interviewing assignments, intercept a sample of returning boat

operators at the assigned sites on the assigned dates, and collect data from boat operators that fished for or incidentally caught large pelagic species. Sampling for the LPIS in 2006-2009 will be conducted according to a three-stage cluster sampling design, where:

1. A specific day and geographic area for returning boats will be selected in the first stage,
2. A cluster of fishing trips returning to that area on that day will be selected in the second stage, and
3. A subset of those trips will be sampled in the third stage.

Activities specific to proper conduct of sampling for the LPIS include:

- Development and monthly maintenance of a comprehensive list of fishing access sites, such as marinas or boat ramps, where interviewers can readily intercept operators of boats returning from offshore fishing trips directed at large pelagic species;
- Monthly revision of site-specific estimates of the expected daily numbers of private boat and charter boat fishing trips directed at large pelagic fishes by month and day type (weekend and weekday);
- Monthly clustering of neighboring access sites as needed to form site clusters with total expected daily numbers of trips that exceed a specified minimum;
- Determination of interviewing goals by state, boat type (private and charter), month, and day type (weekend and weekday);
- Determination of numbers of interviewing assignments needed in each state/boat-type/month/day-type sampling stratum to reach stratum-specific interviewing goals;
- Generation of monthly samples of site-cluster/date assignments for conducting boat trip interviews, using programs provided by NMFS;
- Matching of site-cluster/date assignments with interviewers; and
- Tracking and reporting of interviewer progress in completing assignments and obtaining interviews.

2.1.1 Sample Frame

The sample frame for the LPIS consists of a comprehensive list of fishing access sites, such as marinas or boat ramps, to which boats return from fishing trips directed at large pelagic fishes. This list of sites, called the master site register (MSR), will provide information on the geographic location of each site, as well as estimates of the daily expected numbers of private and charter boat large pelagic fishing trips returning to each site for both weekdays and weekend days. Whenever possible, these estimates shall be based on averages of actual counts obtained on prior visits to the site in the same month of a previous year. When prior counts are not available, then estimates should be based on a reasonable assessment of the number of boats using the site, the proportion of boats that are used to fish for large pelagic species, and the relative frequency of trips by such boats at nearby sites, where previous counts are available. NMFS will provide the Contractor with the most current version of the LPIS MSR as a SAS dataset. Variable descriptions for the 2005 MSR are included in Appendix B.1 (Dataset Variable

Descriptions and Codes).

To increase interviewing efficiency, individual sites in the MSR shall be grouped together as needed to form site clusters with reasonable total expectations of interviewing productivity. Sites with expected high numbers of interviews (generally more than 4 per day) shall remain unclustered, while sites with lower expectations of interviewing success shall be grouped together with other nearby sites. Clustering of sites should attempt to raise the total number of expected interviews while minimizing the driving distance between sites. Factors to consider in assigning sites to clusters include the relative fishing pressures at each site, the proximity of sites within a cluster and the historical interviewing productivity at sites within a cluster. Sites within a cluster may vary from month to month (i.e., two sites may be part of the same cluster for June but not July). The Contractor will work closely with NMFS to determine which sites should be clustered together and which should stand alone. Contractor decisions regarding clustering of sites must be made at least four weeks prior to sampling for a particular month and will be subject to NMFS approval.

Each site, or site cluster, shall be categorized according to its total expectation of eligible interviews and assigned a weight based on that categorization. The relative weight of each site or site cluster will determine its probability of selection in the random draw conducted as the first stage of LPIS sampling. This probability-proportional-to-size (PPS) approach assures a relatively high level of interviewing productivity because the “high expectation” sites, or site clusters, will be selected for interviewing more frequently than the “low expectation” sites.

Since sites will be selected for interviewing assignments in relation to their estimated fishing pressure, it is imperative that the MSR contain the most accurate and current fishing activity information possible. The MSR should not be static, since fishing activity is constantly changing. The Contractor shall update the MSR at least once each month based on information obtained on interviewing assignments or other visits to the sites during that month. The Contractor shall be responsible for maintaining and updating the MSR continuously during the period of contract award, and for providing updated site lists in SAS format to NMFS each month. The Contractor shall review and update the large pelagic fishing activity estimates for each site before each month, and shall ensure that every site is physically inspected at least once every three months to update the MSR, regardless of whether or not that site was assigned for interviewing. The site register updates must be completed before the assignment draw for each month, which generally occurs approximately three weeks before the month begins. This allows enough time to schedule assignments and inform interviewers of their schedule.

Sites should never be removed from the MSR. If there is no longer LPS fishing activity at a site the site pressures should be coded as zero but the site should remain on the MSR. Contractor staff, field supervisors and interviewers should also be on the look out for new sites to add to the MSR that are not currently being sampled. New LPIS sites can be discovered through 1) visual observation while in the field, 2) discussions with captains, mates, anglers, site managers, others, and 3) researching fishing magazines, agency and other web sites, and other sources of

information.

Certain sites at which interviewers are not welcome by the site management should be coded as “hostile sites.” Hostile sites should be excluded from the sample frame (see 2.2.3 “Hostile Sites and Refusals”). However, accurate fishing activity estimates must be maintained for hostile sites. The MSR should serve as a useful database for assessing the geographical and temporal distributions of fishing activity hence it shall be used for determining appropriate distributions of interviews between day types and/or geographic subregions of states. Such information is important for setting appropriate interviewing goals by county, month, and day type (weekend vs. weekday).

Interviewers shall be responsible for recording total fishing activity by boat type during each interviewing visit to each site. They should collect data on the total number of boats returning from fishing trips that targeted large pelagic species. In addition, they should obtain anecdotal information on fishing activity levels from marina operators and boat ramp fishing shops. Newspapers and weekly magazine fishing reports also provide useful background on fishing activity. Fishing activity information should be recorded on the Site Description Form (SDF, Appendix C.1 Site Description Form). Data collected on visits to sites that are not assigned for interviewing during a given month should also be recorded on the SDF.

Information in the LPIS MSR should be consistent with the Marine Recreational Fisheries Statistics Survey MSR. MRFSS site names and site codes should be used where applicable, and geographic coordinates should be obtained from the MRFSS MSR. Directions to each site should be compared with similar information provided in the MRFSS MSR, and modifications should be made as necessary to make the information match. The contractor shall be responsible for modifying the LPIS MSR as necessary to ensure consistency with the MRFSS MSR. NMFS will provide the Contractor with the MRFSS MSR.

2.1.2 Sample Target Allocations

The goal of intercept sampling shall be to collect specified minimum numbers of private and charter boat interviews in each month in each state or multi-state stratum. The Contractor shall be responsible for ensuring that the temporal and geographic distributions of sampling within a given state, month and fishing mode strata are representative of the true distributions of marine recreational fishing effort directed at large pelagic fishes. Therefore, interviews should be distributed in a representative manner across weeks within a month, among the different day types of each month (i.e., weekday versus weekend/holiday) and among different geographic areas within each state or multi-state stratum.

NMFS will set target interview allocations for each state (or multi-state area), boat type, and month stratum. A minimum number of samples (i.e., interviews) per stratum will be distributed across all strata. The minimum samples per stratum are 20 interviews for both private boat trips and charter boat trips (minimum sample sizes for ME and NH are 10). The remaining samples

will be distributed in an effort to attain statistical and data collection goals as determined by NMFS. Generally, additional interviews beyond the minimum levels are allocated among strata to reflect the expected distribution of fishing effort and/or catch for select species among those strata.

The approximate LPIS 2006-2009 allocations of intercept survey interviews by state, boat type, and month are shown in Appendix D. The allocations in Appendix D are considered approximate and NMFS may choose to order more or fewer interviews in any particular strata based on changes in the fishery, management priorities or statistical considerations. NMFS will issue delivery orders providing the target sampling allocations by state, boat type and month, prior to the first month of 2006 sampling.

In some low activity periods when fishing activity varies greatly between the first and last weeks of the month, it may be desirable to establish different interviewing goals for the first and second half of a given month. To accurately assess such abrupt shifts in fishing pressure within a month, information on such shifts should be added to the MSR on a site-by-site basis. The Contractor shall discuss any proposed changes to the allocation of interviews within a month with NMFS and get NMFS approval prior to implementation.

The interviewing goals for the week and weekend days of each month for each boat type should reflect the distribution of total angler fishing trips between the two day-types. This distribution can be approximated by using the distribution of total weekend and weekday fishing activity estimates as categorized over all sites in the MSR for each month. NMFS will supply a SAS program that uses the weekend and weekday pressure ratings in the MSR to determine the appropriate distribution of interviews for each state/boat-type/month sampling stratum.

2.1.3 Sample Draw

The Contractor is responsible for determining the appropriate numbers and distributions of site/date interviewing assignments needed to achieve interviewing goals. An assignment is defined as a 2-8 hour effort to intercept and interview anglers at one or more sites in an assigned site cluster on an assigned date. Assignments should be drawn separately for each state (or multi-state area), boat type, month, and day type strata. The Contractor shall estimate the number of sampling assignments required to obtain the interviewing goals in each state/boat type/month/day type sampling stratum and then draw assignments accordingly. Historical interviewer productivity data should be used for this purpose. Such data are available in past LPIS datasets and monthly reports which will be provided by NMFS to the Contractor.

Assignments shall be distributed between weekend days (and holidays) and weekdays to target a weekend/weekday distribution of interviews that matches historical distributions of large pelagic fishing trips. The day for each weekend or weekday site assignment shall be drawn at random.

The actual number of completed assignments needed to reach the sampling goal may be higher

or lower than the minimum estimate based on historical productivity, because levels and distributions of actual interviewing productivity can vary from year to year for a variety of reasons. Therefore, it may be necessary to draw some additional assignments above the estimated minimum needed to assure that all interviewing goals can be reached. Conversely, drawing too many assignments can lead to a situation where interviewing goals would be greatly exceeded and unnecessary costs incurred that NMFS would not cover (i.e., NMFS will not pay for interview target overages). NMFS will only pay for actual completed interviews with eligible respondents up to the target allocation within a state (or multi-state)/month/boat type sampling strata. NMFS will not allow the Contractor to make-up for interview shortfalls experienced in one state (or multi-state)/month/boat type sampling strata with overages attained in another state (or multi-state)/month/boat type sampling strata. Therefore, it is important to balance the potential costs/risks of too many assignments against the potential costs/risks of too few.

Once the minimum number of assignments has been estimated, this number should be increased by some amount to set the number of assignments to be drawn and issued to interviewers. The site-sampling program will draw this number of assignments in the first two separate rounds of sampling, with each site assignment coded to reflect the round in which it was selected. Assignments drawn in the first round will be “fixed assignments” that will be given priority over the “flexible assignments” drawn in the second round. The fixed assignments must be completed even if interviewing goals are reached before the end of the month. The flexible assignments should always be completed unless interviewing goals for the month have already been reached. Therefore, once interviewing goals for a month have been reached, the Contractor may cancel all remaining flexible assignments for that month.

The Contractor should avoid drawing so many assignments that sampling goals are exceeded within the first couple of weeks of a month. Such an approach would likely result in temporal distributions of interviews that would not be representative of true distributions of fishing effort. Excessive “front-loading” of survey sampling without any consideration for the accuracy of resulting sampling distributions will be considered unacceptable by NMFS.

The Contractor should determine an additional number of assignments to draw for each month beyond the minimum number estimated to meet the sampling goals. These additional assignments can then be drawn during the third round of the assignment draw and held in reserve. If interviewing productivity is running lower than expected during the first two weeks of the month, “reserve assignments” can be issued to provide additional sampling coverage for the remainder of the month. Overuse of reserve assignments could also lead to temporal distributions of interviews that would not be representative of true distributions of fishing effort. Therefore, the number of reserve assignments should be minimized and should not exceed 50% of the total assignments (fixed + flexible) originally issued.

NMFS will provide a SAS program to be used for drawing site/date assignments prior to the first month of interviewing. This program will draw sites using systematic sampling of a list of sites

ordered by county and sorted randomly within counties. Each site will be replicated in the list as many times as needed to reflect its relative probability of selection. The complete list of replicated sites will be ordered by county and randomly sorted by site within counties. The replicate entries of the same site remain clustered together within the random sorting of all sites in a county. For each round of site sampling, a sampling interval n , equal to the size of the total list divided by the number of site assignments to be drawn, will be used, and systematic sampling of the list will start at a randomly selected start point between 0 and n . The sample will then be drawn by selecting every n th entry on one complete pass through the list. If there are any sites that are replicated in the list more than n times the number of available assignment dates, they will be removed from the list prior to the draw and automatically selected for the maximum number of times. The remaining site assignments would then be drawn from the remaining list of sites after adjusting the sample size and recalculating the sampling interval.

The sampling distribution and schedule shall be the responsibility of the Contractor and subject to approval by NMFS. The complete schedule of site/date interviewing assignments for each month must be submitted to NMFS prior to its distribution to interviewers. NMFS will have three working days to review and approve the schedule.

The draw of fixed, flexible, and reserve assignments should be conducted at least three weeks prior to the start of a given month of sampling. The assignment-sampling program will require inputs of the numbers of initial (fixed and flexible) and reserve assignments to be drawn for each state/boat-type/month/day-type stratum. Individual site/date assignments will be assigned a unique control number that reflects the type of assignment (fixed, flexible, or reserve). The control number can be used in tracking the ultimate outcome of the assignment.

2.1.4 Sample Distribution

Once the sample of site/date interviewing assignments has been drawn for a given month of interviewing, the Contractor is responsible for issuing those assignments to individual interviewers, tracking the completion of those assignments, and reporting progress made toward meeting the established interviewing goals.

The first step of implementing the sampling schedule is matching the schedule of assignments with individual interviewers. “Fixed” assignments should always be given priority over “flexible” assignments, and both fixed and flexible assignments should be given priority over any “reserve” assignments issued during the month. Assignments may be matched with interviewers to minimize travel costs, but all issued assignments must be covered regardless of interviewer proximity or availability. The staffing of trained interviewers must assure coverage of all fixed and flexible site/date assignments.

Assignments should not be rescheduled to accommodate the preferred schedules of interviewers. If necessary, new interviewers must be hired and trained to assure that assignments are covered on the assigned dates. The interviewing staff should be geographically distributed such that

coverage of all sites is assured. Under no circumstances should fixed or flexible assignments not be issued because “no interviewer is available” to cover the assignment. If an interviewer quits, gets fired, or otherwise becomes unavailable, then assignments issued to that interviewer must be reassigned to another interviewer as soon as possible to assure that no gaps occur in the temporal and geographic distributions of sampling. If necessary, such re-assigned assignments may be rescheduled as described below for “bad weather” assignments. A record should always be kept of the originally assigned date of each assignment, as well as any subsequently rescheduled dates.

Within each month, sampling effort should be distributed evenly and monitored on a weekly and sometimes daily basis to prevent clustering of samples at the beginning or end of the month. Clustering could be caused by meeting monthly goals too early in a month, or by trying to catch up and finish the sampling goals at the end of a month. Monthly allocations of interviews are set as sampling goals and are not to be treated as monthly quotas. Small deviation of the actual distribution of interviews from these monthly goals will not determine the Contractor’s success in meeting minimum sampling levels set at the state/month/boat type level. However, large deviations from monthly sampling goals could potentially be viewed as an indication of poor performance.

During periods of low fishing activity, it may be feasible to schedule two assignments for one interviewer on the same day. Employment of this strategy would depend on NMFS prior approval of a workable implementation plan proposed by the Contractor. Such a proposal should attempt to minimize potential clustering effects in the temporal and geographic distributions of sampling. The Contractor may also assign more than one interviewer to a given assignment if the fishing pressure is expected to be too great for one interviewer to adequately sample. Employment of this strategy would also depend on NMFS prior approval.

Site assignments may never be changed once the assignment has been drawn. The date of an assignment may only be changed if the assignment has been cancelled due to “bad weather” or due to unexpected interviewer problems, such as illness or car trouble. If the weather on the assigned date is so bad that no fishing is likely to occur at the assigned site, then the assignment may be rescheduled for the next available day of the same day type (i.e., weekend/holiday or weekday) within the same month. Rescheduled assignments should not take precedence over fixed or flexible assignments that were originally scheduled for that day. Rescheduled fixed and flexible assignments do take precedence over reserve assignments that were originally scheduled for that day. If the assignment could not be completed on the assigned date because the assigned interviewer became ill, had car trouble, or failed to visit the site for some other reason, then the assignment may also be rescheduled according to the same procedures. Interviewer failures to complete issued assignments on the assigned dates should be minimized and unreliable interviewers should be replaced as needed.

Some rescheduling of sampling assignments may be necessary to prevent overlaps with samplers working to conduct interviews for other surveys, particularly the MRFSS. In the event that a

MRFSS interviewer arrives at a site and finds an LPS interviewer on-site, or an LPS interviewer arrives at a site and finds a MRFSS interviewer on-site, the MRFSS interviewer takes precedence unless: 1) the site is an alternate site for the MRFSS interviewer (i.e., not originally assigned), in which case the MRFSS interviewer should relocate to another alternate site; OR 2) the site is the only one in the LPIS cluster, in which case the MRFSS interviewer should relocate to an alternate site. Both interviewers are expected to cooperate in determining who should relocate to another site. NMFS staff may provide MRFSS assignment schedules to the LPIS contractor if warranted. All incidents of such overlap between LPIS and MRFSS interviewers (or other interviewers), and how they were resolved, must be recorded and brought to the attention of NMFS by the Contractor in a timely manner.

2.1.5 Sample Monitoring

The Contractor is responsible for tracking and reporting the fates of all issued interviewing assignments according to the delivery schedule. The Contractor shall be responsible for taking appropriate control and administrative measures to ensure that the sampling goals set by NMFS are met for each and every sampling stratum. The Contractor shall require all interviewers to report the numbers of assignments completed and the numbers of interviews obtained on those assignments each week. Weekly tallies of assignments completed, rescheduled, or cancelled, as well as weekly tallies of interviews obtained for each boat type must be delivered to the NMFS Contracting Officer's Technical Representative in spreadsheet format by Tuesday of the following week to allow accurate tracking of progress toward reaching sampling goals. These weekly tallies should list, at a minimum, the date and site of each completed scheduled assignment, the sites visited on that assignment, alternate date if the assignment was rescheduled, and a summary of the number of interviews obtained in each fishing mode by each site visited.

The Contractor must track the success of interviewers in completing assignments so that any failed assignments due to "bad weather" or "interviewer problems" can be successfully rescheduled and/or re-assigned in a timely manner. A record must be maintained of any re-assignments of interviewers or re-scheduling of dates such that the fates of all originally issued assignments can be reliably tracked through to completion or cancellation. Reasons must be recorded and provided to NMFS for all failed assignments that are either rescheduled or cancelled. The Contractor should maintain a complete accounting of the fates of all assignments drawn for each month. This information should be provided to the NMFS in a SAS dataset at the end of the month in an Assignment Completion File (see Appendix B.5 for Assignment Completion File variables). NMFS will provide the Contractor with an example Assignment Completion File SAS dataset from 2005.

The Contractor shall track the distributions of interviews obtained relative to the established sampling goals by month, day type and state to determine whether or not it may be necessary to either issue reserve assignments to assure that sampling goals and/or interview distribution goals will be met, or to cancel remaining flexible assignments to prevent unnecessary overages. Reserve assignments must only be issued in the last two weeks of a month to assure the

attainment of minimum sampling goals.

2.2 Assignment Procedures

2.2.1 Before the Assignment

Each interviewer should make sure that he/she knows his/her interviewing schedule. The Contractor home office or the designated field supervisor shall schedule interviewers for assignments on a monthly basis. Before accepting each assignment, each interviewer should know the site codes, names and locations of all sites within the assigned interviewing cluster. Interviewers should consult the most current LPIS Master Site Register to obtain this information and contact their field supervisor if they have any questions. Interviewers should not try to memorize the sites within a cluster since sites within a cluster may vary from month to month.

The only reason for not completing a scheduled assignment is if weather conditions do not allow for offshore game fishing and no boats are out that might be targeting or have incidentally caught a large pelagic species. This type of cancelled assignment is referred to as "weathered-out." Interviewers should obtain offshore weather reports to determine if an assignment should be "weathered out." If there are small craft warnings on the assigned date, the interviewer should check the fishing activity at the assigned site(s) to confirm that no vessels are out fishing. Interviewers shall notify their field supervisors within 24 hours if an assignment has been "weathered out." Likewise, field supervisors should be contacted immediately if an interviewer determines that he/she cannot do an assignment due to unforeseen circumstances or emergencies. If possible, another interviewer should complete the assignment on the date for which it was originally drawn. Rescheduling of "weathered out" or other canceled assignments shall only be done in coordination with the Field Supervisor and the Contractor's home office staff according to proper procedures (refer to 2.1.4 Sample Distribution).

Each LPIS interviewing assignment shall specify a cluster of sites (or a single high-pressure site), a date, and a boat type. Interviewers must always start their assignments at one of the sites in the assigned cluster of sites, and they should give priority to interviewing operators of boats of the assigned type (charter or private). The starting time on the specified date for each assignment shall be determined based on the understanding that an assignment may last no longer than eight hours and that interviewers should be present at the corresponding interviewing access points at the time of day when boats that fish for large pelagic fishes are most likely to return from fishing. In order to determine the optimal time of day, interviewers must gather information on the temporal distribution of returning boats at assigned sites prior to each assignment. Sources of information include but are not limited to:

- Master Site Register – The MSR has a field for "best time to interview" based on historical visits to each site. This is a good starting point but should not be relied upon solely as this can change from one year to the next.
- Call the site(s) - Determine if a person that works at the site(s), such as the Dockmaster,

will provide reliable information concerning the number of boats that went out and the time that they are expected back. Phone numbers for contact persons are provided in the MSR. While calling ahead can help the interviewer determine when to visit a site it should not be used to determine if a site should be visited. Interviewers should physically visit all sites within a cluster to determine firsthand if there is fishing activity or not. Under no circumstances should an assignment be canceled based solely on information obtained by calling the sites within a cluster.

- Ask the Field Supervisor - When accepting assignments interviewers may consult with their supervisor regarding the best sampling times and which site in a cluster to visit first.
- Newspaper articles, weekly magazine fishing reports, and large pelagic fishing related web sites may be useful for monitoring activity levels, upcoming tournaments, and seasonal openings and closures of marinas and/or charter boat operations.
- State natural resource agency personnel, NMFS regional personnel, and NMFS port agents may also be good sources of information on the patterns of offshore pelagic fishing at specific sites.

On each interviewing assignment, the interviewer must carry a complete set of all necessary manuals and forms, as well as all needed equipment in useable condition. Prior to the assignment date each interviewer should make certain that he/she has all of the required materials and equipment for conducting interviews, including:

- Name Tag
- LPIS Procedures Manual
- Fish identification field guide(s)
- Tape Measures – two kinds for measuring straight lengths and curved lengths
- Letter from NMFS – a letter on NMFS letterhead that provides a brief description of the LPIS, information required by the Paperwork Reduction Act and the Privacy Act of 1974, and contact information for a NMFS representative (see Appendix E for 2005 example letter)
- LPS brochures and other informational materials that will be provided periodically by NMFS in volumes suitable for wide-spread distribution to all interested respondents
- LPIS Master Site Register – the list of clusters/sites with location and fishing activity information for the state or region
- Site Description Form (SDF) – the form used to update site fishing activity information, and to summarize completed interviews, incomplete interviews, interviews refused, interviews not possible due to language problem, and ineligible persons encountered by reason of ineligibility (see Appendix C.1 for 2005 example)
- Assignment Summary Form (ASF) – the form used to summarize labor hours and completed interviews, and to check-in with the on-site manager or dockmaster (see Appendix C.2 for 2005 example)
- Screening Introduction – the series of questions used to determine the eligibility of an intercepted boat operator for the survey (see 2.2.4 Screening Procedures below)
- LPIS Questionnaire/Coding Form – the form which includes the questions used for

collecting data from eligible respondents and the check-boxes or spaces used for recording respondent data (Appendix A)

- List of Boats with an HMS Permit – the list of boats with the NMFS HMS permits sorted by permit category (charter/headboat vs. angling or general) and sorted alphabetically by boat name within the permit category for the state or region. The list should include the actual permit number for each boat. NMFS will provide this list to the Contractor.

2.2.2 Arriving at the Site

All interviewers must have the required materials listed above in their physical possession when on site. Interviewers should not leave required materials in the car. Interviewers should dress casually but neatly. Shorts are acceptable, but bathing suits are not. T-shirts are acceptable. Shoes or sandals should be worn while interviewing. Alcohol or illegal drug use or intoxication on assignment is strictly prohibited. Fishing while on-assignment is prohibited.

If interviewing is to be conducted at a site where there is a site manager (i.e., dockmaster, marina operator or some other contact person) present, interviewers must "check-in" with that person upon arrival at the site. Interviewers must introduce themselves to the contact person, ask and record the person's name and contact number on the Assignment Summary Form (ASF), and ask if they would verify the interviewer's presence at the site by initialing the ASF. The ASF includes a brief statement explaining why the interviewer is at that site. Interviewers must explain the nature of the survey, its objectives, and how they will be performing their work that day. Interviewers should provide copies of the letter from NMFS (see Appendix E for an example letter) and any NMFS brochures to the site manager, as available. If the manager wants more information than is immediately available, he/she should be encouraged to contact the person listed on the letter.

The interviewers should then check to see if any boats that fish for large pelagic species have gone out that day and, if possible, determine when those boats are likely to return. Such information is important for assessing the potential number of interviews that may be obtained at the site, as well as the appropriate interviewing schedule for that day. The interviewer may then proceed to visit other sites in the assigned site cluster to assess the interviewing potential and appropriate interviewing times at all sites assigned for that day. Once the interviewer has assessed the interviewing potential at all sites in the assigned cluster, he/she should use a strategy for moving from site to site that maximizes the number of potential completed interviews for the assignment. Interviewers should move from site to site with the intent of maximizing sampling of returning boats at all access points within the defined cluster. In determining where to locate, the interviewer should give priority to the site, or sites, with the most expected offshore pelagic fishing trips by boats of the assigned boat type on that day. Interviewers should strive for efficiency and should not sit at sites where there is no expectation of intercepting and interviewing an eligible boat operator. The interviewer may obtain interviews at any or all of the assigned sites and may move from site to site in whatever manner is appropriate to maximize the

number of interviews obtained on the assignment. Under no circumstances should an interviewer move to another marina or ramp that is not within the boundaries of the assigned site, or site cluster.

Interviewers should position themselves so that they can observe as much activity as possible at the site(s). The goal is to intercept as many eligible respondents as possible. The best locations to be positioned will vary from site to site. Interviewers should consult with their Field Supervisors regarding the best location to wait at for a given site. Interviewers should be careful not to station themselves next to a fish cleaning station, weigh station, or hoist if that would prevent them from intercepting returning boats with little or no catch. This could result in biased catch estimates. It is important to pick an access point for interviewing that maximizes the chance of intercepting all returning boat operators, regardless of catch.

Although priority shall be given to a specific boat type on any given interviewing assignment, interviewers may obtain interviews with operators of both charter boats and private boats on all assignments. However, priority should always be given to getting interviews for the assigned boat type. For example, if “charter” is the assigned boat type and both a charter boat and a private boat return at about the same time, priority should be given to intercepting and interviewing the operator of the charter boat rather than the private boat.

Interviewers are not prohibited from interviewing at a site where a fishing tournament is in progress. However, when interviewing at a tournament site the interviewer should be sure to record information identifying the tournament, and whether or not the reporting vessel was participating in the tournament.

On occasion an LPS interviewer may encounter a MRFSS interviewer at the same site. In the event that an LPS interviewer arrives at a site and finds a MRFSS interviewer on-site, or a MRFSS interviewer arrives at a site and finds an LPS interviewer on-site, the MRFSS interviewer takes precedence unless: 1) the site is an alternate site for the MRFSS interviewer (i.e., not originally assigned), in which case the MRFSS interviewer should relocate to another alternate site; OR 2) the site is the only one in the LPIS cluster, in which case the MRFSS interviewer should relocate to an alternate site. Both interviewers are expected to cooperate in determining who should leave the site.

At some sites it is possible and advisable to build rapport with the potential respondents present prior to conducting any interviews. Those who have had the opportunity to meet the interviewer and discuss the survey tend to be more cooperative when asked for an interview. A key factor in gaining the respondent's initial cooperation and confidence in the study lies in assuring him/her of the non-enforcement nature of the survey. Respondents often need to be reassured that the information they provide is confidential under NOAA Administrative order 216-100 and the Privacy Act. Interviewers should always remind them they are not there to issue citations or fines, and that the purpose is to collect accurate fishery data. When explicitly given the true purpose of the survey very early in the introduction, respondents tend to be much more willing to

cooperate with the survey.

The canvassing process should be very informal and as unobtrusive as possible. The conversation might begin with "Good Afternoon" or "How's it going?" While canvassing, the interviewer should introduce themselves and be respectful. The interviewer should be polite at all times, regardless of any complaints that he or she may receive. Under no circumstances should an interviewer identify him/herself as an employee of the National Marine Fisheries Service.

2.2.3 Hostile Sites and Refusals

Sites where interviewers are impeded or prohibited from interviewing are referred to as "hostile" sites. When an interviewer encounters a hostile site as part of their assigned cluster they should take the following action:

- Avoid confrontation with the site manager or any other persons at the site and leave the "hostile" site immediately.
- Record that the site was "hostile" on their Site Description Form (SDF) and record the reason why (e.g., the owner or manager refused to allow LPIS interviewers on their dock).
- Notify their Field Supervisor as soon as possible.

When drawing LPIS assignments "hostile" sites should not be included in the sample frame. Interviewers should know which sites are "hostile" in their area and should not visit such sites on future assignments. The Contractor should attempt to convert "hostile" sites to cooperative sites so that they can be visited by interviewers and included in future assignment draws. NMFS should be notified, in advance, of all attempts to persuade hostile sites to cooperate. Field Supervisors should visit the "hostile" site and speak with the manager/operator to try to remedy the situation. Field Supervisors can politely remind the manager of a "hostile" site of the mandatory LPS reporting requirements. However, they must never threaten law enforcement nor should they defend the NMFS or its policies. If the Field Supervisor cannot convince the site manager to allow interviewing at the site, the Contractor's LPIS program manager should follow-up with a phone call (or visit) to further try to remedy the situation.

At other sites LPIS interviewers may be allowed to interview but only at certain locations within the site as determined by the site manager (e.g., interviewing allowed at slips but not at the fuel dock). Interviewers should note this on the SDF but can continue to interview at the site in the locations allowed.

Interviewers may encounter captains who refuse to participate in the survey because they are in a rush, don't agree with NMFS policies or a variety of other reasons. Captains who don't agree with NMFS policies should be encouraged to contact NMFS directly to air their complaints (using the address or phone number on the To Whom letter). It is not appropriate for an

interviewer or Field Supervisor to defend or attack NMFS or its policies. If individual captains or owners of eligible vessels refuse the survey they should be informed that they could designate a proxy (e.g., mate) to participate. If they continue to refuse the survey and will not designate a proxy as the respondent the interviewer should do the following:

- Avoid confrontation with the captain and walk away from the vessel.
- Tally as either initial or mid-interview refusal on the SDF and record the name of the vessel, name of person refusing, any LPS fish seen, the reason for refusal and any other details in the comments section.

The Contractor should provide NMFS with weekly “hostile” site / refusals status updates that include but are not limited to the following:

- Site name and location
- Date and brief description of incident including persons/vessels involved
- Attempts to remedy situation and resulting outcomes

2.2.4 Screening Procedures

When an interviewer encounters an operator of a returning boat, he/she should use the screening introduction to introduce himself/herself, state the purpose of the survey, and ask questions which will determine whether the respondent is eligible for an interview. The interviewer should give his/her name and state that the study is sponsored by NMFS. If the intercepted boat operator is willing to cooperate, the interviewer should then ask the series of questions used to determine eligibility. To be eligible for the survey, the potential respondent must be the captain or owner of a boat that has just completed an offshore fishing trip that targeted large pelagic species or incidentally caught a large pelagic species. For the purposes of the screening introduction, large pelagics include all of the species listed on page 2 of Appendix A LPIS Questionnaire. Boat operators returning from fishing trips that used hand-gear (rod and reel or handline) and specifically targeted, but did not catch any of the specified large pelagic species would be considered eligible. In addition, those returning from trips that fished with hand-gear and caught at least one fish in this list of species would be eligible, even if they did not specifically target any of these species. Therefore, data are desired for all hand-gear fishing trips that either targeted or caught at least one of these large pelagic fishes.

If an eligible operator of a charter or private boat chooses to designate a crew member or passenger to respond to the survey as a “proxy”, then that individual shall be considered eligible for an interview. In such cases, it will be necessary for the interviewer to record that the respondent was a designated proxy for the captain or owner of the boat.

Screener Item 1: On this vessel, are you the captain, owner, or mate or passenger (proxy designated by the captain to participate in this survey)?

- If the respondent says "yes", go to Screener Item 2.
- If the respondent is not the captain or owner or designated proxy, try to locate the eligible respondent. Otherwise, terminate the interview, and tally as NOT CAPTAIN OWNER OR MATE on the Site Description Form.

Screener Item 2: Did your boat just return from an offshore rod and reel or handline fishing trip in which you targeted or incidentally caught large fish such as tunas, billfish, sharks, swordfish, dolphinfish, wahoo, amberjack, or other large pelagic fish?

- If the respondent says "yes", go to the intercept questionnaire.
- If the respondent says he/she was fishing for some other species the interviewer should probe to determine if they were also fishing for any other large pelagic species; if the respondent was not targeting a large pelagic species **and** did not catch a large pelagic species then the interview should be terminated and the respondent tallied on the Site Description Form (SDF) as DID NOT TARGET OR CATCH LARGE PELAGIC FISH.
- If the respondent does not want to participate in the survey, and large pelagic fish are observed being landed from the vessel in plain view, the interview should be terminated and the respondent tallied on the Site Description Form as a REFUSAL. The respondent's name and/or vessel name should be recorded in the comments section of the SDF.

2.2.5 Interviewing Procedures

After identifying an eligible respondent, the interviewer should use the questionnaire (Appendix A) to conduct an interview that will collect the necessary information outlined above. As soon as the respondent's eligibility is established, the interviewer must read the Privacy Act statement, which states:

“Your participation in this survey is mandatory. Your responses will be treated as confidential records.”

The brief statement above satisfies the Privacy Act requirements, as long as an additional form with the following additional information is available:

“The data is protected by the Privacy Act of 1974 and NOAA Administrative Order 216-100.”

This information is included in the letter from NMFS (Appendix E), which should be provided to all eligible respondents.

Intercept Interview: Item by Item Instructions

Items 1 through 8 are not questions to be asked of the respondent. They are primarily identifying information.

- Item 1 INTERVIEWER CODE. Each interviewer must be given a unique four-digit identification number. This number should be used on all submitted forms.
- Item 2 DATE OF INTERVIEW. The interviewer should record the Month/Day of the intercept. Two digits for both the month and the day should be used.
- Item 3 TIME OF INTERVIEW. Using military time, record the time that the interview was completed. Military time runs on a 24-hour clock starting at 0001 hours (one minute past midnight) and ending at 2400 hours (midnight).
- Item 4 STATE CODE. Enter the two-digit numeric code for the state of intercept. FIPS state codes to use are as follows:

Alabama	AL	01
Connecticut	CT	09
Delaware	DE	10
Florida	FL	12
Georgia	GA	13
Louisiana	LA	22
Maine	ME	23
Maryland	MD	24
Massachusetts	MA	25
Mississippi	MS	28
New Hampshire	NH	33
New Jersey	NJ	34
New York	NY	36
North Carolina	NC	37
Rhode Island	RI	44
South Carolina	SC	45
Texas	TX	48
Virginia	VA	51

- Item 5 CONTROL NUMBER. Each assignment is given a four-digit identifying number. The first digit of the control number indicates if it is a weekend or

weekday assignment. If the first digit is a 1, it is scheduled for a Saturday, Sunday, or holiday (e.g., July 4th, Independence Day). If the first digit is a 2, it is scheduled for Monday, Tuesday, Wednesday, Thursday or Friday. The second digit indicates the mode of the assignment. A 1 indicates an assignment during which charter boat intercepts are preferred; while a 2 indicates that private boat intercepts are preferred (interviews can be conducted in either mode on any assignment). The 3rd and 4th digits are used as counters for the number of assignments given out in a given state and month.

- Item 6 **DOCUMENT NUMBER.** Throughout an assignment, the interviewer should consecutively number forms completed for the assignment. **BOTH PAGES** of the first interview should be numbered 01; **BOTH PAGES** of the second interview should be numbered 02, etc. All forms sent in should be numbered, regardless of interview status.
- Item 7a **COUNTY.** Enter the three-digit FIPS number assigned to the site of the intercept. The county code should be listed on the interviewer assignment listing, as well as in the site register.
- Item 7b **SITE NUMBER.** Enter the four-digit FIPS number of the site where the interview is being conducted. The site number should be listed on the interviewer's assignment schedule as one of the sites within the assigned cluster, as well as in the site register.
- Item 7c **CLUSTER.** Interviewer should enter the two digit number for the cluster of sites assigned for that day. The cluster number should be listed on the interviewer's assignment schedule.
- Item 8 **SITE TYPE.** Enter the type of site at which the interview took place.
If interview took place at a marina, code 1.
If interview took place on a private dock, code 2.
If interview took place at a public ramp, code 3.
If interview took place at some other type of site, code 4.
- Item 9 **BOAT NAME.** If the name of the boat is evident (e.g., if it is written on the boat itself), then the interviewer need only verify the information with the respondent, and fill in the name on the coding form. If the boat name is not apparent, the interviewer should ask the respondent "What is the name of your boat?" and fill in the information. If the boat has no name, the interviewer should leave the first set of boxes at Question 9 blank and fill in the "no name" oval underneath.

It is extremely important that interviewers record the vessel name **EXACTLY** as it appears on the vessel, or **EXACTLY** as the captain specifies. If the vessel is on

the permit frame, they should record the name EXACTLY as it appears on the frame. Even slight changes in the spelling of a vessel name can cause significant data quality control problems.

Item 10a IS YOUR BOAT PRIMARILY A...

Item 10a records how the boat is primarily used and identifies partyboats and headboats (which are not eligible for the LPIS). Fill in the appropriate oval. If party/headboat, interviewers should thank the respondent and terminate the interview.

Item 10b WAS THE TRIP TODAY A CHARTER OR PRIVATE TRIP?

Item 10b pertains to the type of trip taken that day, private or charter. Fill in the appropriate oval.

Items 11a through 13b

VESSEL IDENTIFICATION

These questions are asked in order to further identify the boat. The best means of identification is the NMFS Highly Migratory Species (HMS) / Atlantic Tunas permit number. Interviewers should be given an ID list of permitted vessels in their state (or multi-state area). The ID list is a database containing boat-identifying information, such as the permit holder's name, the NMFS Highly Migratory Species or Atlantic Tunas permit number and category, and the Coast Guard documentation number or State registration number, sorted by boat name in alphabetical order. An ID list will be created for each state or multi-state area. Some states will also receive a permit list sorted by ascending hull number. This is helpful for those areas that have a lot of small unnamed private boats targeting tunas. The Contractor should provide interviewers with an ID list before interviewing begins and should update this list at least once during the sampling period. NMFS will provide the Contractor with HMS permit lists as needed to create these ID lists. There are privacy issues surrounding these ID lists so the information on these lists should never be shown to anyone else. Permit holder contact information (e.g., address and phone number) should not appear on this list. The information on the ID list is merely used to assist in the verification of a boat's HMS permit number.

If vessels are still out fishing when the interviewer arrives on-site he/she may have time to look up the vessels in the ID listing before the vessels return. This way the interviewer needs only to confirm the information with the respondent when conducting the interview. If there is no time to look up the vessels beforehand, interviewers should ask the questions on the form as they are written. If a respondent does not want to get their permit information, the interviewer should offer to check to see if the boat is on the ID list. If so, the interviewer should verify the listed information with the respondent, instead of formally

asking him/her the questions. However, if the vessel is not on the ID listing, then the interviewer should ask the questions to get the permit information directly from the respondent. Respondents should be informed that they would have to just get the information once. Interviewers should record the information in their copy of the ID listing. Interviewers should inform their Field Supervisors of any changes or additions to the ID list, and Field Supervisors should make sure these changes get passed on to other LPIS interviewers in the area and to the home office staff.

Although an intercepted boat may be listed on the ID listing, it is essential that interviewers verify all ID listing information with the respondent for the following reasons:

- Though the boat may have been interviewed before, it is possible that the respondent was not interviewed (e.g., if a boat has more than one owner); if this occurs, be sure to get the new respondent's information, so that it can be added to the ID listing;
- There could be a mistake on the ID listing;
- There may be more than one vessel with the same boat name.

If interviewers are unable to obtain the HMS permit number they should try to obtain the Coast Guard documentation number or the state registration information. It is very important that interviewers get at least one of these identification numbers.

- Item 11a VESSEL PERMITTED. If the intercepted vessel's NMFS HMS/Atlantic Tunas permit number is contained on the ID listing, the interviewer need only verify the information with the respondent. If this is not the case, ask the respondent "Does your boat have a NMFS HMS permit number?" If the respondent answers "yes", fill in oval 1 and go to Item 11b. If the respondent answers "no", "don't know" or refuses, fill in ovals 2, 8, or 9 respectively, and go to Item 12a.
- Item 11b NMFS HIGHLY MIGRATORY SPECIES/ATLANTIC TUNAS PERMIT NUMBER. Enter the vessel's NMFS HMS/Atlantic Tunas permit number. If the interviewer is able to obtain the permit number, they should skip to Item 14. If the respondent does not know or refuses to give his/her number, check the "don't know" or "refused" boxes, as appropriate, and go to Item 12a.
- Item 12a VESSEL DOCUMENTED. If the interviewer is unable to get a NMFS HMS/Atlantic tunas permit number, they must ask Item 12a. If the intercepted vessel's Coast Guard documentation number is contained on the ID listing, the interviewer

need only verify the information with the respondent. If this is not the case, the respondent should be asked "Is your vessel documented with the Coast Guard?" If the respondent says "yes", fill in oval 1 and go to Item 12b. If the respondent answers "no", "don't know" or refuses, fill in ovals 2, 8, or 9 respectively, and go to Item 13a.

- Item 12b VESSEL DOCUMENTATION. Enter the intercepted vessel's Coast Guard documentation number. If the Coast Guard number is not already contained on the ID listing, chances are the respondent will have to do a little searching to locate it (it probably will not be on the side of the boat). Encourage the respondent to find the number, and tell him/her that once we get the number into our database, we shouldn't have to ask them to search for it again. If a number is given as an answer for 12b that appears to be legitimate but there are not sufficient boxes for the digits, write the remainder of the number outside the box. If they do not know the number and/or cannot find it, fill in the "don't know" oval and go to Item 13a. If they refuse to give a number, fill in the "refused" oval and go to Item 13a. If the interviewer is able to obtain the Coast Guard number, they should record and go to item 14.
- Item 13a VESSEL REGISTERED. If the interviewer is unable to get an HMS permit number or a Coast Guard documentation number, they must ask Item 13a. If the intercepted vessel's state registration is apparent (on the side of the boat), or if the registration number is listed on the ID listing, the interviewer need only verify the information with the respondent. If this is not the case, ask the respondent "Does your boat have a state registration number?" If the respondent says "yes", fill in oval 1 and go to Item 13b. If the respondent answers "no", "don't know" or refuses, fill in ovals 2, 8, or 9 respectively, and go to Item 14.
- Item 13b VESSEL REGISTRATION. Enter the intercepted vessel's state registration number. If the number is written on the side of the boat, or if the state registration number is contained on the ID listing, the interviewer need only verify the information with the respondent, and fill in the information on the coding form (including the state abbreviation). If the interviewer can not determine the state registration number, they should ask the respondent "What is your boat's state registration number?" and fill in the information (including the state abbreviation). If a number is given as an answer for 13b that appears to be legitimate but there are not sufficient boxes for the digits, write the remainder of the number outside the box. If the vessel is not registered, or if the interviewer is unable to obtain the registration number, they should leave Item 13b blank. If the respondent does not know the number and/or cannot find it, fill in the "don't know" oval. If they refuse to give a number, fill in the "refused" oval
- Item 14 STATE CODE. Record the 2 digit numeric state code for which the respondent

indicates is the vessel's primary port state in the next set of boxes, and record the state's abbreviation as well. See Item 4 above for listing of state codes.

- Item 15 RETURN TIME. The purpose of this question is to determine when the respondent returned from his/her trip. If the interviewer actually sees the respondent return to the site, they need only verify the return time with him/her. Otherwise they should ask "At about what time did your boat return to this site?"
Use military time to record the return time.
- Item 16 TARGET SPECIES. Fill in the appropriate code for the species or species group that the respondent was primarily targeting on the intercepted trip. To save time during the interview it is best to write down the name of the target species and fill in the species code later. It is important that interviewers probe to find the primary target species, since there is room for only one response on the coding form. If the primary species code is not listed, simply record the actual species name in the blank provided. If the respondent says they were targeting SHARKS but will not specify species then code 3591 for Unknown Shark. The code for unclassified Tuna is 4656. If they say they were targeting no particular species or anything code as 8888 for "All species combined." If they targeted a species for which there is no established LPS species code then record as 5250 for "OTHER" and write the name in the space available. If the respondents states that he/she was targeting bluefin tuna, be sure to determine which size class they were targeting. If they will not specify which size class of bluefin tuna they are targeting, code 4670. See Appendix F for complete list of LPS species codes. If the respondent indicates targeting a species for which there is no code in Appendix F the interviewer should make a note of this on the form and the Contractor should contact NMFS for the appropriate code.
- Item 17a TOURNAMENT PARTICIPATION. Check the appropriate box to indicate if the intercepted vessel was participating in a tournament on the intercepted trip.
- Item 17b TOURNAMENT NAME. If the respondent answered yes at question 17a, ask for the name of the tournament at question 17b, and fill in the name on the coding form (one letter per box). If the angler was not fishing in a tournament, leave Item 17b blank.
- Item 18 PRIMARY GEAR. Indicate the primary fishing gear used on the intercepted trip. In most areas, this will usually be oval 1 (rod and reel). If the angler states that a fishing gear other than rod and reel or handline was primarily used, fill in oval 3, write in the other gear and terminate the interview.
- Item 19 NUMBER OF LINES. Interviewers should enter the number of lines the boat had in the water.

- Items 20 HOURS FISHED. Indicate the number of hours spent actually fishing with the primary gear. Do not include the time spent traveling to and from the fishing area(s).
- Item 21 BAIT USED. Indicate if live, dead, and/or artificial bait was used on the intercepted trip with the primary fishing gear. Be sure to fill in all ovals that apply.
- Item 22 METHOD(S) USED. Indicate whether anglers were trolling, chumming or chunking or other- *Fill in all ovals that apply and SPECIFY IF OTHER.*
- Item 23 NUMBER OF ANGLERS. Indicate the total number of anglers who were actively involved in large pelagic fishing on the intercepted trip. Do not include persons who did no fishing.
- Item 24 LOCATION. Indicate the latitude and longitude coordinates of the main fishing site that was used for the intercepted trip. If the respondent states that he/she was fishing at one of the sites on the fishing area list, write the area name on the line provided and fill in the corresponding lat/long from the list (see Appendix G LPIS Fishing Area List). If the respondent was not fishing at one of the listed areas, ask the respondent to indicate the area at which he/she was fishing and obtain the lat/long if possible.
- Item 25 MILES OFFSHORE. Indicate the maximum number of miles that the vessel was from land on the intercepted trip. Be sure to get the mileage to the nearest point of land, as opposed to the mileage to the site of intercept.
- Item 26 WATER DEPTH. Indicate the depth (in feet) at the intercepted vessel's fishing location. If the respondent cannot provide an exact depth, try to obtain a depth range, and use the midpoint. If the response is given in fathoms convert to feet (6 FEET = 1 FATHOM), or just write the number of fathoms to the side of the boxes on the coding form, and later convert the measurement to feet.
- Item 27 WATER TEMPERATURE. Indicate the surface water temperature in degrees Fahrenheit. This can usually be obtained from the captain.
- Item 28 NAME AND PHONE. A percentage of all interviews are validated. To do so, we must have a name and phone number where the respondent can be reached for an extremely short interview (about 2 minutes). This number will not be used for the Large Pelagic Telephone Survey, and the respondent does not necessarily need to give his/her full name, or a home phone number. (A first name and a work phone number is fine.) Clearly record the respondent's name and phone

number (including area code) in the appropriate boxes on the coding form. It is imperative that interviewers ask this question of all respondents and the information recorded comes only from the respondent. Interviewers should never back-fill this information from the ID List or other sources of information.

Bottom of
First Page

WERE ANY FISH CAUGHT, LANDED, or RELEASED?

If yes, then the interviewer will continue the interview on the second page. If respondent answered no then the interview is completed. Additionally, if respondent answers no then only the first page of the intercept will be sent in. Always remember to fill in one of the two ovals. Otherwise, it will not be possible to determine whether or not there should be a second page tied to the intercept.

Questions 4, 5 and 6 are identifiers that are repeated at the top of the second page. This will prevent confusion when numerous forms are processed. Always complete these blocks.

Item 29 CAUGHT FISH. Indicate if any fish were caught on the fishing trip. If fish were caught, fill in oval 1 for "yes". If no fish were caught, the respondent claims that they do not know if fish were caught, or if they refuse to answer, fill in oval 2, 8, or 9 as appropriate, end the interview, and thank the respondent for their time.

Item 30 FISH COUNTS. If fish were caught, indicate, by species:

- The number of fish that the angler kept;
- the number of fish released alive;
- the number of fish released dead;
- the number of fish kept that have been or will be sold.

Note: The count for “number of fish to sell” should be a subset of those fish that were kept. Be sure that the respondent includes all kept fish when they are asked the first part of Item 30 “number kept.” When asked "How many of those ____ that you kept did you sell or do you plan to sell?" the response should be a subset of those fish that were kept.

Interviewers should ask respondents if they can see all fish that were kept. If for some reason kept fish are not available to be counted and identified, the interviewer should make a note of this in the “notes” area on Item 30. If the interviewer is absolutely certain that the respondent is making a mistake in count or species identification, they should record the correct information on the form, as opposed to the incorrect information supplied by the respondent. The Guide to Sharks, Tunas & Billfishes of the U.S. Atlantic & Gulf of Mexico and Guide to the Tunas of the Western Atlantic will help with species identifications.

Peterson's Field Guide to Atlantic Coast Fishes of North America is also a good source of information. When in doubt about the species identity of any unobserved fish, the interviewer should appropriately identify the fish at a higher taxonomic level, such as genus or family. Interviewers are expected to be able to identify all observed fish to the species level.

For the purposes of this survey, bluefin tuna size classifications should be determined by its straight fork length as indicated in Item 30 on the survey form. If a respondent reports that he/she caught and kept 4 school bluefin, for example, and at Item 30 the interviewer was able to measure the fish and find that one is 1156 millimeters long, they should code Items 30 and 31 to reflect that the angler caught and kept only 3 school bluefin, along with 1 large school bluefin.

Fill out the corresponding coding boxes for each species that the vessel caught. If the respondent cannot remember or refuses to indicate how many he/she kept or released of a certain species, record "don't know" or "refused" (as appropriate) in the margin. Try to probe the angler for catch information (species and numbers), particularly for incidental catch and released fish that are not available for inspection. Anglers will sometimes use a local name for a species that does not match the accepted common name provided in Appendix F (e.g., "footballs" refer to school size bluefin tuna). Interviewers should refer to the Local Names list provided in Appendix F if they cannot figure out what species the angler is referring to. Interviewers must probe to ensure they are recording the correct species since some local names are used to refer to more than one species. The local names list should be updated regularly to reflect new names encountered in the field.

Fill in zero's where appropriate for disposition boxes. For example, if the respondent says they "released alive" all of the fish, be sure to fill in 00 in the appropriate boxes for "number kept," "released dead" and "number to sell." Do not leave the boxes blank.

If an interviewer encounters a species not listed on the form, they should write in the name of the species at the "Other" line, along with the counts by disposition. All fish species caught should be included on the form even if they are not large pelagic fish. If there are more than two "Other" fish (fish not on the list of species), use as many second pages of the interview form as necessary to include all fish caught. On each second page Items 4 through 6 must be filled in at the top of the page. Please refer to the species code list in Appendix F and record the code after recording the name of fish that are not listed in the table on the second page of the intercept form. If the respondent caught a species for which there is no code in Appendix F the interviewer should make a note of this on the form and the Contractor should contact NMFS for the appropriate code.

Item 31 FISH MEASUREMENTS. Once the interviewer has counted and identified all observed catch, he/she should ask for permission to measure at least a representative sample of the fish to obtain lengths. If the angler did catch and keep any fish, ask "May I measure the fish?" If the respondent says "yes", fill in oval 1. If the respondent refuses to let the interviewer measure the fish, or has no fish available to look at, then fill in oval 2 and indicate why the fish were not measured in the notes section provided in Item 30. Fish that have been filleted are not considered available for measuring. If more than 10 fish are available for measuring, fill in Items 4 through 6 at the top of the second half of another form and use that form to fill in the remaining fish lengths. Use as many forms as necessary.

If the respondent has large pelagic fish available to look at, the interviewer should collect the following data:

- SPECIES CODE** Use the four digit species codes provided in Item 30 for LPS species; if the species code is not listed, record the actual species name and look up the species code in the list provided in Appendix F.
- LENGTH** Measure the straight fork length of all fish in millimeters. For the following tuna species, curved fork lengths should also be recorded: bluefin, bigeye, albacore, yellowfin and skipjack. All length measurements should be taken using proper procedures and with NMFS approved measuring tapes or devices.
- GENDER** For all sharks and dolphinfish (mahi mahi), record the gender of each fish (1=male, 2=female, 8=undetermined).
- PREP** Record the preparation of the species (0=whole, 2=gutted, 6=pectoral length). Only fish that are whole or gutted should be measured (prep= 0 or 2). The only exception to this rule is for Giant Category and Large Medium Category bluefin tuna and only if the full body length cannot be obtained. If these fish are brought in headed then the interviewer may obtain a pectoral length measurement and place a 6 in the PREP code box indicating a pectoral length measurement. Fish that have had their tail cut off should not be measured.
- BILLFISH & SWORDFISH** Special boxes for measuring billfish and swordfish are located at the bottom of the second page of the intercept questionnaire. There are boxes for both

an upper measurement (tip of upper jaw (bill) to fork) and a lower jaw measurement (tip of lower jaw to fork). If a billfish is measured, the interviewer should record the upper tip of bill length to the fork only if the bill is intact (complete). Do not record the upper bill length if the bill is broken.

See Appendix H. Measuring Fish for more information on the procedures for measuring various types of fish.

SUB-SAMPLING

All fish should be measured if possible. However, due to time constraints it may not always be possible to obtain length information for all available fish. Interviewers need to budget their time and maximize the number of interviews obtained with eligible vessels. If there are so many fish that individual measurements cannot be obtained, then a representative sample of fish should be measured. For example, if there were 38 dolphinfish and there is only time to record 10 measurements, then ten fish could be sub-sampled. To randomly sub-sample the fish, interviewers should blindly determine which fish to inspect rather than purposely try to pick the fish that look "average."

2.2.6 Site Description Form

The Site Description Form (SDF) is used to summarize the results of the completed assignment with information from each site (within a cluster). Interviewers must fill-out a Site Description Form for each assignment completed. An example of the Site Description Form used in 2005 can be found in Appendix C.1 Site Description Form.

INTERVIEWER CODE	see 2.2.5 above
INTERVIEW DATE	see 2.2.5 above
STATE CODE	see 2.2.5 above
CLUSTER ID	see 2.2.5 above
CONTROL NUMBER	see 2.2.5 above

SITE # NAME

SITE #1 CODE Enter the site name and four-digit number of the first site visited. The site number should be listed on the interviewer's assignment schedule as one of the sites within the assigned cluster, as well as in the site register.

COUNTY CODE #1 Enter the three-digit number assigned to the site visited where interviews are being conducted. The county code should be listed on the interviewer's assignment schedule, as well as in the site register.

ESTIMATE # OF ELIGIBLE VESSELS

PER DAY FOR CURRENT MONTH

Estimate the number of eligible vessels per day for the current month on a good weather day that will return to the site. This estimate will likely vary by mode (private vs. charter boats) and the day type (weekend vs. weekday). Under "PR" enter the numbers estimated for both weekend and weekday for Private boat trips. Under "CH" enter the numbers estimated for both weekend and weekday for charter boat trips.

BEST TIME

Enter the code (provided on form) for the best time to intercept vessels according to weekend and weekday for each mode (charter and private).

STATUS:

All intercepted persons should be classified under the appropriate status and tallied on the Site Description Form for each site. Status definitions are as follows:

COMPLETED INTERVIEWS

Enter the number of completed verifiable interviews with eligible respondents. The interview is considered a completed verifiable interview with an eligible respondent if responses are provided for all questions and there is:

- A respondent name and telephone number
- Or
- A boat name and vessel identifier that is in the ID listing

Use Question 11b to determine mode: If permit type is charter/headboat then record as CH for charter boat interview; if permit type is General or Angling then record as PR for private boat interview. Permit type should be verified using the ID list, if the vessel is listed.

If the respondent does not have an HMS permit, does not know what type, refused the question, and the vessel is not listed in the permit listing, refer to Question 10a (Boat Primarily Operated As) to determine mode of interview (1 = PR, 2 = CH).

If the respondent does not know or refuses to answer 10a, then refer to 10b (trip today) to determine mode of interview (1 = CH, 2 = PR). If the respondent does not know or refuses to answer 10b, note in the comments section of the SDF.

MID-INTERVIEW REFUSALS

If the interviewer initiates the interview questionnaire with a respondent but they terminate the interview after questioning has begun, the

interviewer should thank the respondent for their time and tally.

INITIAL REFUSALS

If a seemingly eligible respondent refuses to be interviewed at all, it is considered an "initial refusal" and should be tallied. Ask the person his or her name and record it along with the boat name (and any other identifying information, such as state registration #) in the comments section of the SDF (see 2.2.3 Hostile Sites and Refusals).

LANGUAGE BARRIER:

Fill in the number of interviews that could not be obtained due to language incompatibility. If interviewer initiates an interview with a respondent, but they are unable to continue due to communication (language) problems, tally. Interviews may be conducted with a captain's translator, if one is present. If this does occur make a note of this on the SDF.

ESTIMATE OF MISSED ELIGIBLE BOATS

Interviewers should determine the number of eligible boats missed at each site because they were in the midst of another interview. Interviewers should record the number of boats appearing to be eligible that they were unable to intercept at each site because they were interviewing another vessel's respondent. Do not include boats that may be at other sites within the cluster. Rather, include those vessels in the section on the SDF for the other site.

BOATS THAT HAVE NOT RETURNED

When interviewers leave a site within the assigned cluster, and there are still boats that are expected back, they should record the number of vessels that have not yet returned.

DID NOT TARGET OR CATCH LARGE PELAGIC SPECIES

If an interviewer discovers during the screening process that they have intercepted someone that did not just complete an offshore oceanic fishing trip during which they targeted, caught, released, or incidentally caught large pelagic fish, then they should tally the respondent in this box.

If large pelagic fish are in plain view and the respondent claims that they did not target or catch large pelagic fish, then do not tally this person as 'DID NOT TARGET OR CATCH LARGE PELAGIC FISH'. Instead, tally the respondent as an initial refusal and ask the person his or her name

and record it along with the boat name (and any other identifying information, such as state registration #) in the comments section of the SDF.

**NOT CAPTAIN/OWNER
OR MATE**

If an interviewer discovers during the screening process that they have intercepted someone who is not the captain, owner or designated proxy (Screener Item 1) then they should try to locate the eligible respondent, if all eligible respondents for the vessel have already left the site then tally as 'NOT CAPTAIN/OWNER OR MATE.'

The data fields above must be recorded for each site visited on a particular assignment whether or not any interviews were actually obtained.

2.2.7 Assignment Summary Form

In addition to the SDF, interviewers must fill-out an assignment summary form (ASF) for each completed assignment. The ASF may also be used to keep time and expense information if the Contractor chooses to use it for that purpose as well. A sample ASF used in 2005 is included in Appendix C.2 Assignment Summary Form.

Only intercepted boat operators (captains or owners) who cooperate for a complete interview shall be considered “respondents”, and only complete interviews of such respondents shall be counted toward interview quotas.

NAME	Interviewer name
INTERVIEWER CODE	see 2.2.5 above
INTERVIEW DATE	see 2.2.5 above
STATE CODE	see 2.2.5 above
COUNTY	see 2.2.5 above
CLUSTER ID	see 2.2.5 above
CONTROL NUMBER	see 2.2.5 above

BEGIN Enter the time (military format) when the assignment began. That is, the time when the interviewer arrived on-site to begin their assignment.

END Enter the time (military format) when the assignment ended. That is, the time when the interviewer left the cluster and terminated the assignment.

WEATHER FAVORABLE FOR FISHING OFFSHORE?

Fill in the oval for “Yes” if the weather conditions are favorable for offshore fishing. If the offshore conditions are poor, fill in the oval for “No.” In general, strong winds (25-30 knots, especially from the

Northeast) and high seas (especially greater than 8-10 feet) will cause many offshore fishermen to cancel their trips. Assignments that are conducted despite poor offshore conditions should be attempted only when fishing activity can be confirmed beforehand.

Of Complete Verifiable Interviews With Eligible Respondents

The ASF is used to record the total number of completed interviews (by mode) for that assignment. This is simply the sum of the completed interviews for each site visited from the SDF.

Check-in With Site Manager

As described in 2.2.3 “Arriving at the Site”, the bottom of the ASF includes a brief statement explaining why the interviewer is at that site followed by boxes for the site manager’s (or contact person’s) name, phone number and initials.

2.3 Field Personnel Requirements

2.3.1 Field Supervisor Qualifications, Training and Supervisory Tasks

The Contractor is responsible for recruiting, hiring, testing, and training field supervisors for the LPIS. The Contractor must assign a field supervisor to each state or multi-state area. The field supervisor must have extensive knowledge of the recreational fisheries in their state/area, particularly large pelagics fishing. This person must also have prior field interviewing experience, preferably on the LPIS or some other related fisheries survey. Field supervisors must be able to identify all fish species in their area and must score 100% on the fish identification exam given to new interviewers (see 2.3.2 Interviewer Qualifications below). They must also have knowledge of all the sites on the LPIS MSR in their area and be able to answer interviewer questions regarding the site register, site locations, or strategies for interviewing at particular sites. Field supervisors must also be able to answer any questions regarding interviewing procedures, coding of forms, and collection of biological data that interviewers may have.

In addition to attending the regular LPIS interviewer training, field supervisors must be trained by the project manager to perform the following supervisory tasks:

- Coordinating assignment scheduling for interviewers in their area (Contractor may decide to assign this task to home office staff as well)
- Quality control field visits with interviewers (see below 2.4.2 “LPIS Field Validation of Interviewers”)
- Facilitating local LPS data review meetings
- Visiting “hostile sites” and attempting to remedy the situation
- Updating the MSR as needed

- Updating the permit holder ID List with new information provided by interviewers and NMFS.

In addition to their local data review meeting, field Supervisors are expected to attend two LPS data review meetings each year (see 2.7 below). Field Supervisors are also expected to attend the annual LPIS contract start-up meeting to be held in Silver Spring, Maryland sometime prior to sampling in June.

2.3.2 Interviewer Qualifications, Training and Supervision

The Contractor is responsible for recruiting, hiring, testing, and training field interviewers for the LPIS. The Contractor must make certain that they have enough field interviewers available in each area to cover the assignment load required in this SOW. Interviewer training shall be conducted at appropriate sites no later than five days prior to commencement of interviewing. During their first assignment, all new interviewers must be accompanied by a supervisor. This will allow the supervisor to provide “on-the-job” training and assure that each new interviewer is adequately prepared to work on their own.

The Contractor shall screen applicants and invite for training only those that have sufficient experience in the identification of fishes and sufficient knowledge of the recreational fishery for large pelagic fishes. The Contractor shall require invited applicants to pass a qualifying exam before hiring and training them as field interviewers. The qualifying exam shall include, but shall not necessarily be limited to the following:

- Identification to the species level of fishes known to be common components of the offshore recreational pelagic fishery.
- Demonstration of familiarity with recreational fishing methods and locations for the capture of large pelagic fishes.

Once applicants who qualify have been hired, they should be trained to accurately and consistently identify to the species level all fishes they are likely to encounter to the species level. All interviewers shall be required to accurately identify the 25 most common large pelagic species in their area before they are allowed to work as interviewers. Both new and experienced interviewers shall be tested on species identification at least twice per year – once prior to the start of sampling for the year and once near the midpoint in the sampling year. Experienced interviewers also need to attend a refresher training session prior to the start of field work each year.

The training of new and experienced intercept survey interviewers shall include but shall not necessarily be limited to the following:

- An explanation of the objectives, goals, and operation of the LPIS, and a detailed explanation of the component surveys of the LPS (i.e., FHS add-on, LPTS) and their

- relationship to the dockside intercept survey
- A brief introduction to the objectives, goals, and operation of the catch card census programs (currently in Maryland and North Carolina), the MRFSS, and the for-hire survey (FHS).
- An explanation of NMFS permits and regulations concerning bluefin tuna, other tunas, and other highly migratory species.
- A detailed explanation of procedures for canvassing sites in assigned site clusters to determine appropriate strategies for maximizing the number of returning boats intercepted.
- A detailed explanation of procedures for intercepting boats, screening and interviewing boat captains or owners, and gaining cooperation from boat captains and owners, and dealing with refusals and hostile sites. Training shall include procedures for requesting permission to board a vessel to examine the catch.
- A detailed explanation of proper procedures for coding and editing responses to the questionnaire on the intercept survey data form and for filling out other forms.
- A detailed explanation of proper procedures for the use of field guides and/or taxonomic keys to accurately identify fish species to the species level of classification and to identify the sex of individual fish of certain species.
- A detailed explanation of proper procedures for measuring available fish.
- A general discussion of the principles and techniques involved in random sampling that specifically addresses the importance of randomly sub-sampling fish for measurement and of randomly sub-sampling boats at very active interviewing sites.
- A discussion of procedures to be used for obtaining local information on fishing activity and for updating LPIS MSR fishing activity information.

2.3.3 Training Documentation

The Contractor shall prepare all training, examination, and study materials needed for hiring and training interviewers and field supervisors. The Contractor shall provide both electronic and paper copies of all such materials to NMFS before using them. The Contractor shall prepare written procedures and include them in a manual to be used for training field interviewers and also as a reference for interviewers to consult in the field. These procedures shall be developed from the procedures outlined in this statement of work and any further modifications of procedures to be provided by NMFS. The procedures manual shall be subject to review by NMFS, and must be submitted for NMFS review at least two weeks prior to the start of training. The contractor shall deliver both electronic copies and hard copies of the final procedures manual to NMFS prior to the start of training.

2.4 Quality Control of Data Collection

2.4.1 Interview Telephone Validations

The Contractor is required to conduct follow-up telephone interviews to validate 10% of all the LPIS completed interviews obtained. The Contractor will work with NMFS to develop a Telephone Validation Questionnaire (see Appendix I LPIS Telephone Validation Questionnaire from 2005). NMFS may require that additional questions be added to this questionnaire as necessary. Activities specific to proper conduct of telephone validations for the LPIS include:

- Generation of a 10 percent sample of intercept survey respondents to be called and interviewed for the purpose of validating intercept interviews;
- Dialing and contacting selected intercept survey respondents within 3 weeks of the date of the interview to avoid recall problems.
- Conducting a validation interview with survey respondents to determine if an interview was conducted at the specified site on the specified date and to determine whether or not the interviewer conducted the interview in a professional manner according to specified procedures.
- Tracking and reporting of progress in completing follow-up telephone validation of intercept interviews.
- Make accessible to NMFS the ability to silently monitor LPIS telephone validations from a remote location.

The sample sizes for the follow-up validation survey should be determined separately for each sampling stratum. The total validation sample for each stratum should be calculated as 10% of the total interviews conducted, regardless of whether or not a valid telephone number was obtained. In order to distribute the validation sample for each week in a representative manner across interviewing assignments, the Contractor should order interviews by date, interviewer, assignment number (first or second of day), and interview number and then take a systematic sample from the list.

Because some intercept survey respondents may refuse to provide a telephone number for the purpose of follow-up validation, the number of intercept interviews will frequently exceed the number that can potentially be validated. In addition, some level of non-response should be expected because some telephone numbers provided by intercepted anglers may prove to be invalid and some intercepted anglers who supplied valid numbers may be difficult to reach. In order to adequately compensate for potential non-response, the Contractor should select more than the minimum number needed to achieve the 10% validation goal.

Once the weekly sample of angler intercepts with telephone numbers has been selected and telephone interviewing has begun, the Contractor should track progress toward validating the minimum 10% sample of interviews. Data collected in the telephone validation interviews should be reported to NMFS as specified in the monthly report. Monthly reports should include:

- the number of intercept interviews obtained by state and interviewer code
- the number of validations attempted by state and interviewer code
- the number of validations completed by state and interviewer code
- an explanation of any interviews that did not validate initially or did not validate at all

Interviews that do not validate initially should be investigated immediately by the Contractor to determine why the interview did not validate. The Contractor should contact the respondent and conduct a more thorough interview in an attempt to validate the entire questionnaire form. If the Contractor still cannot validate the interview he/she should contact NMFS immediately and explain the situation. The Contractor should also contact the interviewer and his/her field supervisor to try to determine why the interview did not validate.

2.4.2 LPIS Field Validation of Interviewers

Contractor activities specific to the proper conduct of LPIS field validations include:

1. Development of a NMFS approved quality control evaluation form to be used for field visits;
2. Generation of a 5 percent sample of assignments to be validated that assures that each interviewer is visited with the same relative frequency;
3. Conducting a field validation;
4. Tracking and reporting of progress in completing field validations in the monthly reports.

The Contractor shall conduct spot-checks of field interviewers on assignment. At least 5% of all of the dockside assignments made in a given week should be visited by a field supervisor. Spot-checks shall be distributed in a manner that insures that all field interviewers are visited on site with the same relative frequency. At least 50% of all such site visits shall be unannounced. Field supervisors must check that the interviewer has arrived at the assigned cluster with the necessary materials needed for interviewing and for identifying and measuring fish. During such visits, the field supervisor shall observe the interviewer's work to be sure that questions are correctly asked, response data are properly recorded, fish are accurately identified and measured, and all other interviewing procedures described in this SOW are followed. The quality control evaluation form must include fields to record whether or not these procedures were followed and, if not, what specific problems were detected in the interviewer's performance.

Results of the field validation interviews should be reported in the monthly reports. Monthly reports should include by strata the number of assignments completed, the number of field validations attempted, and the number of field validations completed. Monthly reports should also include an explanation of any problems field supervisors encountered with interviewer performance during their field validations and how those problems were corrected or resolved. If significant problems are encountered in the field the Contractor should notify NMFS immediately. The Contractor should have field supervisors conduct additional field visits (beyond the 5%) with interviewers who perform poorly until the problem is resolved or the interviewer is terminated.

2.4.3 Validation of HMS Vessel Permit Numbers

The data fields for HMS permit number and principal port state (Appendix A, Q11c and Q14 respectively) are used to determine if a vessel is considered in-frame or out-of-frame in the calculation of effort estimates. A ratio estimator is used to adjust the effort estimates upwards to account for out-of-frame vessel trips (i.e., vessels fishing in other states or vessels without an HMS permit). It is, therefore, very important that these variables are valid and accurate when the data are delivered to NMFS. The Contractor must check the validity of HMS permit numbers from the data forms against the current HMS permit holder lists (Angling, General and Charter/Headboat categories) provided by NMFS at the end of each month. Any records that do not match on permit number, permit category, captain/owner name, and principal port state must be further investigated until they are resolved. Further investigation may involve checking original data forms, contacting interviewers, telephone validation follow-up calls with respondents, and other measures as needed to resolve the discrepancy. A section on the validation of HMS permit numbers (with tables and discussion) should be included in the monthly reports (see 2.6.1 below).

2.5 Survey Data Preparation

The Contractor shall be responsible for entry of all LPIS data in SAS database format according to specifications supplied by NMFS. The contractor shall work with NMFS to develop standardized database structures and formats (see Appendix B Data Variable Descriptions and Codes). NMFS will provide the Contractor with example SAS datasets from 2005 for all datasets required as deliverables in 2006. All computer software developed for the entry and/or checking of LPIS data shall become the sole property of NMFS and shall be delivered to NMFS upon completion of each contract year. The Contractor shall provide copies of such software for NMFS review, evaluation, and approval prior to implementation. Any revisions of such software shall also be submitted for NMFS review, evaluation, and approval prior to implementation. NMFS will provide the Contractor with SAS error-checking programs used in 2005 to use as a starting point for 2006.

NMFS shall reserve the right to decide whether or not data should be key-entered or scanned. Offerors who propose to use either key-entry or scanning methods should explain the potential advantages and disadvantages of one method versus the other. In addition, offerors should clarify whether or not their estimated costs would depend on the data entry method used.

In addition, the Contractor shall be responsible for editing LPIS data as needed to correct possible coding and data entry errors. The Contractor shall develop well-documented SAS programs to check all variables in the standard SAS datasets for possible errors. Every variable shall be checked for possible errors, including checks on range, logic, and reasonableness. Examples of edit checks shall include but not necessarily be limited to the following: (1) checks for duplicate interview identification numbers, (2) checks for correct spelling of boat names

(must allow for boats without names) and boat operator names, (3) checks for correct state and site codes, and (4) checks for reasonableness of reported fishing activity and catch.

Key-entry and checking of interview data should be conducted in a timely manner such that any errors and appropriate corrections in data coded by interviewers can be determined by direct communication with the interviewer within two weeks of the date of the interview. Any coding or data entry errors identified as a result of the checking process shall be corrected by development of well-documented SAS error-correction programs. Copies of all checking and error-correction programs developed by the Contractor shall be delivered to the NMFS along with the error-free SAS datasets.

The Contractor shall be responsible for delivery of all LPIS data in SAS database format according to specifications supplied by the NMFS. Error-free files of intercept survey data shall be sent electronically to NMFS by 5:00 PM on the 21st day following each month of data collection. In addition, the Contractor shall deliver an electronic copy of the LPIS MSR, as well as a copy of the fully documented computer program used to draw the assignments for each month.

2.6 LPIS Reporting Requirements

2.6.1 Monthly Reports and Annual Report

The Contractor shall prepare and deliver monthly reports on the results of the LPIS. The monthly reports shall cover the results of all intercept sampling efforts for a given month and shall be delivered to NMFS by the 28th day of the following month. The reports should provide detailed presentations of the work involved to facilitate completion of the survey and the results. The report shall include but shall not necessarily be limited to the following tables (with explanatory text):

- Number of LPIS interviewers by state (or multi-state area). Column headings should include number of trained interviewers (at start of month), resignations/terminations (during month), new hires (during month), and total interviewers (at end going into next month).
- Result of drawn assignments by state and sampling round (fixed, flexible and reserve). Column heading should include: number drawn, number and percent issued (of drawn), percent completed (of drawn), number completed on drawn date, number completed on other date, number not completed.
- Result of drawn assignments by state and mode (CH and PR). Column heading should include: number drawn, number and percent issued (of drawn), percent completed (of drawn), number completed on drawn date, number completed on other date, number not completed.
- Result of issued assignments not completed by state and sampling round (fixed, flexible and reserve). Column heading should include number: issued, not completed, weathered

out, missed and cancelled.

- Disposition results from the Site Description Form. Table should include the number and percent of the following by state: completed PR interviews, completed CH interviews, mid-interview refusals, initial refusals, language barrier, eligible boats missed, eligible boat not yet returned, ineligible (did not target or catch LPS species), ineligible (not owner/captain or designated proxy).
- Complete interviews obtained compared to target allocations. Column headings should include state, mode, quota, obtained, % of quota obtained and interviews per assignment.
- Summary of the output from error checking programs run on LPIS data. Tables should include the following fields by state and interviewer code: total completed interviews, number and percent of interview records with errors traced to form, number and percent of records with errors traced to OCR or data entry, number and percent of records corrected, number and percent of records deleted. High error rates (either field related or home office related) should be explained in the text.
- Table showing by state and interviewer code the number and percent of names and phone numbers obtained (of all completed interviews) for validation purposes.
- Tabulations of NMFS HMS permit status (permitted vs. non-permitted) of intercepted boats by state, primary mode of operation, and permit category.
- Within each state, the number and percent of interviews by county compared to the percent from the site register pressures and the percent from the draw.
- Catch summary table for select species showing the following by state and boat type: number kept, released alive, released dead, sold, measured, minimum and maximum lengths. Species to include are: bigeye tuna, albacore, yellowfin, skipjack, bluefin tuna by size category, white marlin, blue marlin, dolphinfish, swordfish, little tunny, and Atlantic bonito.
- Results of supervisory field visits showing by state and interviewer code the number of assignments completed, the number of field validations attempted, and the number of field validations completed, and any problems identified in a 'comments' field.
- Results of telephone validation of intercept interviews. Table should include: the number of intercept interviews obtained by state and interviewer code, the number of validations attempted by state and interviewer code, the number of validations completed by state and interviewer code, an explanation (in the text) of any interviews that did not validate initially or did not validate at all.
- The number of mismatched HMS vessel permits by state and summary validation results explaining how these were resolved.

In addition to the tables above, the report should include a "recommendations" section proposing changes and improvements to the LPIS based on prior intercept survey experience. This includes plans to increase sampling efficiency, minimize variances, enhance the participation and cooperation of respondents, and increase the visibility and usefulness of the LPIS to the public.

The Contractor also shall prepare and deliver an annual report on the results of the LPIS. The annual report shall cover the entire intercept sampling effort and be delivered to NMFS by

December 31st of each survey year. The content of the annual report should be similar to that outlined above for the monthly reports, summarized across all months of the survey. A description of the coding and editing procedures, as well as quality control measures, must also be included in the annual report.

2.6.2 Final LPIS Documentation

The Contractor shall provide the following to NMFS:

- Electronic copies of the monthly reports and annual report and two bound hard copies of the annual report on the data collection procedures and results.
- Two (2) copies of the final LPIS master site register with site-specific large pelagic fishing activity estimates by boat type, month, and day type for the dockside intercept survey. One electronic copy of the final site frame with appropriate location and activity information shall be provided to NMFS as a SAS dataset.
- Two (2) documented copies and electronic copy of all software used for entry and editing of the survey data into appropriately formatted files.
- Three (3) copies of all training manuals, data collection forms, and procedures manuals used for the surveys. Both electronic and paper copies of all manuals, forms, and procedures shall be delivered. These should include any revisions that are made during the survey periods.

2.7 LPIS Data Reviews

The Contractor shall be required to attend two data review meetings each year. The purpose of these meetings shall be to review preliminary LPIS data and LPS catch estimates, to discuss field interviewing procedures, and to provide continuing education and training of the Contractor's field supervisors. Data reviews will also be used to review data and procedures associated with any of the options in this contract if they are exercised (i.e., LPHS, LPBS or Catch Card Census). The Contractor shall be required to bring at least one field representative for each state or multi-state area to these meetings. The Contractor is expected to pay for travel for their staff, including possible state sub-contractors. The Contractor is also expected to make formal presentations summarizing work completed under this contract for the months prior to the meeting. The Contractor will work collaboratively with NMFS to develop the meeting agenda and any necessary handouts or presentation materials. NMFS will determine the meeting dates and locations and let the Contractor know at least four weeks in advance so they may make the necessary arrangements.

In addition, the Contractor's field supervisors shall conduct at least one local state (or multi-state if applicable) review meetings with their field interviewers per year. The Contractor must notify NMFS within 7 days of when these local meetings will occur. NMFS reserves the right to attend any/all of the local meetings. Local data reviews should be held after the first overall LPS data review (most likely sometime in early September). All interviewers shall be required to attend

these meetings to refresh training on LPIS procedures, to be retested on identification of fish species, to review the basic details of the LPIS, and to explain any changes in questionnaires or coding forms. Raw LPIS catch data (i.e., Fishdumps) should also be reviewed at these meetings. Interviewers shall be kept informed of developments in the recreational fisheries being surveyed, and shall be able to refer respondents to NMFS staff for further information. Questions on protocol and fish identification shall be strongly encouraged during these meetings. The contractor should provide the NMFS with a record of each regional review meeting, including an agenda, attendance list, and meeting minutes within two weeks of the meeting date.

2.8 LPIS Delivery Schedule

Contractor deliverables under this contract include but are not necessarily limited to the following:

LPIS Deliverable	Schedule
Master Site Register with monthly updates	Monthly, due the 21 st of each month following the month sampled
Schedule of assignments by site/date/boat type/round with unique control number for tracking purposes	Monthly, due at least three days prior to distribution to interviewers
Weekly Tallies with assignment dispositions and total number of interviews completed by state and boat type	Weekly, due the Tuesday following the week sampled
Weekly updates on hostile sites and refusals	Weekly, due the Tuesday following the week sampled
Assignment Completion File with the fates of all assignments drawn for each month	Monthly, due the 21 st of each month following the month sampled
All presentations, handouts, exams and other training materials used to train field supervisors and field interviewers	Two weeks prior to initial training (updated versions to reflect any changes) ; final versions at end of contract
LPIS Procedures Manual	At least two weeks prior to initial training session
All computer software used for LPIS data entry and/or error checking	Prior to implementation (updated versions to reflect any changes) ; final versions at end of contract
All forms and questionnaires used in the field or during telephone validations	Prior to implementation (updated versions to reflect any changes) ; final versions at end of contract
Error-free LPIS datasets (SAS format)	Monthly, due the 21 st of each month following the month sampled
LPIS Monthly Reports	Monthly, due the 28 th of each month following the month sampled
LPIS Annual Report	Due December 31 st

Copies of any presentations and handouts prepared for LPS data review meetings	Prior to data review meeting
Record of each regional review meeting including agenda, attendance list and meeting minutes	Within two weeks after meeting is held

2.9 LPIS Items Provided by NMFS

The following will be provided by NMFS to the Contractor to facilitate in proper conduct of LPIS tasks:

- LPIS Master Site Registers (MSR) used in 2005 including site clustering information for all states and months.
- MRFSS Master Site Registers (MSR) used in 2005 for comparison with and consistency with LPIS MSR.
- SAS program that distributes LPIS interview targets within a state/month/boat type strata between day types (weekend/holiday versus weekday) based on pressure ratings in the MSR.
- LPIS SAS datasets from prior years that can be used to estimate interviewer productivity based on historical data.
- Examples of LPIS SAS datasets (Main, Catch and Size) from 2005.
- Assignment draw SAS program used to select monthly sites/clusters for sampling.
- Example Assignment Completion File from 2005 LPIS.
- HMS permit lists for distribution to field interviewers. Updated lists will be available to the Contractor during the sampling period.
- Example of SAS error-checking programs used in 2005.

3.0 Large Pelagics Headboat Survey

The Large Pelagics Intercept Survey (described above) does not cover fishing from headboats (also referred to as partyboats). The Large Pelagics Headboat Survey (LPHS) involves the placement of trained interviewers aboard partyboats/headboats on trips targeting large pelagic species. The purpose of the LPHS is to collect data needed to determine the mean catches per headboat trip of bluefin tuna by size category and of other large pelagics by species.

3.1 LPHS Sampling Tasks

3.1.1 LPHS Sample Frame

Prior to sampling NMFS will provide the LPHS Contractor with an initial list of headboats that have been know to target large pelagic species in past years. The Contractor will call all the

vessels on the list to verify eligibility for the LPHS. The Contractor will work with NMFS and other agencies to add eligible LPHS vessels to the list prior to the start of sampling and throughout the sampling period. For the purpose of this survey a “headboat” is any fishing boat that typically carries anglers for an individual fee. This definition excludes “charter” boats which usually carry up to 6 or 7 anglers who pay as a group. The Contractor is responsible for establishing schedules of trips targeting large pelagic species by the listed headboats. The Contractor will contact each vessel owner before the start of the fishing season and establish a person to contact for each boat, as well as the time(s) and phone number(s) at which to reach that person. All this information will be maintained in a SAS dataset which will be delivered to NMFS prior to sampling and updated whenever changes are made. The LPTS Contractor shall also deliver a schedule of large pelagic fishing trips and anticipated lengths of those trips (single day, ½ day, multi-day) for each boat in a given month.

3.1.2 LPHS Sample Target Allocations

NMFS will provide the Contractor with target allocations for headboat trips by state/month strata at least four weeks prior to sampling. Approximate target sample sizes are provided in the attached pricing sheets.

3.1.3 LPHS Sampling

From the established headboat schedules of large pelagic fishing trips, the Contractor shall randomly select a sample of trips within each state/month strata and arrange for trained dockside survey interviewers to board those trips to obtain catch and biological data. Procedures and programs for the random selection of scheduled headboat trips directed at large pelagic species shall be submitted for NMFS approval at least one month prior to the start of LPHS sampling. Once the Contractor has selected a random sample of scheduled trips, attempts should be made to contact the selected headboat operators to arrange for interviewers to board the randomly selected scheduled trips for that boat. Any refusals from eligible LPHS vessels should be noted and reported by the Contractor to NMFS. Vessel operators often need to be reassured that the information they provide is confidential under the Privacy Act of 1974 and NOAA Administrative Order 216-100. Interviewers should always remind respondents that they are not there to issue citations or fines, and that all they want to collect are accurate fisheries data. Interviewers may be asked to pay a fee to ride certain headboats equivalent to the fee paid by anglers. LPHS assignments must be done on the date scheduled. The only reason for not completing a scheduled LPHS assignment is if the vessel cancels the planned trip. Interviewers must notify their Field Supervisors when an LPHS assignment is "weathered out" within 24 hours. Assignments that are "weathered out" must be rescheduled according to procedures determined by NMFS.

3.2 LPHS Assignment Procedures

3.2.1 Before the LPHS Assignment

Each interviewer should make sure that he/she knows his/her LPHS assignment schedule and confirm that there are no conflicts with LPIS assignments or other work. Before accepting an assignment, each interviewer should know the port location of the assigned vessel and the time the boat leaves. Interviewers should plan to arrive early so they do not miss the boat if traffic conditions are slow or they get lost and to reserve their spot on the boat.

On each interviewing assignment, the interviewer must carry a complete set of all necessary manuals and forms, as well as all needed equipment in useable condition. Prior to the assignment date each interviewer should make certain that he/she has all of the required materials and equipment for conducting interviews, including:

- Name Tag
- LPHS Procedures Manual
- Fish identification field guide(s)
- Tape Measures – two kinds for measuring straight lengths and curved lengths
- Letter from NMFS – a letter on NMFS letterhead that provides a brief description of the LPIS, information required by the Paperwork Reduction Act and the Privacy Act of 1974, and contact information for a NMFS representative (see Appendix E for 2005 example letter)
- LPS brochures and other informational materials that will be provided periodically by NMFS in volumes suitable for wide-spread distribution to all interested respondents
- LPHS Headboat List with contact information and directions
- LPHS Questionnaire/Coding Form – the form which includes the questions used for collecting data from eligible respondents and the check-boxes or spaces used for recording respondent data (Appendix J)

3.2.2 LPHS Interviewing Procedures

The Contractor shall work with the NMFS to develop a questionnaire and a data collection form to be used for on-board interviewing and sampling of headboat catches. The questionnaire/coding form will be similar to the one used for the 2002 LPHS (Appendix J), which is a modification of the LPIS questionnaire.

Items 1 through 7 are not questions to be asked of the respondent. They are primarily identifying information.

Item 1 INTERVIEWER CODE see 2.2.5 above

- Item 2 DATE OF INTERVIEW see 2.2.5 above
- Item 3 CONTROL NUMBER see 2.2.5 above
- Item 4 STATE CODE see 2.2.5 above
- Item 5 SITE NUMBER see 2.2.5 above
- Item 6 TIME OF INTERVIEW see 2.2.5 above
- Item 7 SITE NAME. Enter the name of the port or marina from which the trip is taking place.
- Item 8 FISHING LOCATIONS. Indicate the location name and latitude/ longitude coordinates of three main fishing sites that were used during the trip. If the fishing location is listed on the fishing area list, write the area name on the line provided and fill in the corresponding lat/long (which should be provided on the area list in Appendix G). If the fishing location(s) are not listed areas, ask the captain to indicate the name of the area at which fishing took place and obtain the lat/long.
- Item 9 CAPTAIN'S NAME. Enter the first and last name of the captain.
- Item 10 CAPTAIN'S PHONE #. Enter the captain's 10 digit phone number.
- Item 11 VESSEL NAME. Enter the name of the vessel.
- Item 12a VESSEL PERMITTED. If the intercepted vessel's NMFS HMS/Atlantic Tunas permit number is contained on the ID listing, the interviewer need only verify the information with the captain. If this is not the case, ask the captain "Does your boat have a tuna permit number?" If the captain answers "yes", fill in oval 1 and go to Item 12b. If the respondent answers "no", "don't know" or refuses, fill in ovals 2, 8, or 9 respectively, and go to Item 13.
- Item 12b NMFS HIGHLY MIGRATORY SPECIES/ATLANTIC TUNAS PERMIT NUMBER. Enter the vessel's NMFS HMS/Atlantic Tunas permit number.
- Item 13 TARGET SPECIES. Fill in the appropriate oval for the species name/size class or species group that the anglers aboard the vessel were primarily targeting. It is important that the interviewer probe to find the primary target species. If the primarily targeted species name/size class or group is not listed next to an oval, simply record the actual species name in the boxes provided.
- Item 14 NUMBER OF LINES. Interviewers should enter the average number of lines the boat had in the water.
- Item 15 HOURS FISHED. Indicate the number of hours spent actually fishing with the

primary gear with or without fish on the lines. Do not include the time spent traveling to and from the fishing area.

Item 16 NUMBER OF ANGLERS. Indicate the total number of anglers who were actively involved in large pelagic fishing during the trip. Do not include persons who did no fishing.

Item 17 MILES OFFSHORE. Indicate the maximum number of miles that the intercepted vessel strayed from land on the intercepted trip. Be sure to get the mileage to the nearest point of land, as opposed to the mileage to the site of intercept.

Items 18-22 should not be asked of the captain. Fill in the appropriate information for each question.

Item 18 Were any large pelagic fish caught, landed, or released? If yes then fill in oval 1. If no then fill in oval 2.

Item 19 Is there a second page associated with this document? If yes then fill in oval 1. If no then fill in oval 2. The second page is the table for LARGE PELAGIC COUNTS (See below).

Item 20 Is there a third page associated with this document? If yes then fill in oval 1. If no then fill in oval 2. The third page is the form used to record fish species codes, lengths (Curved Fork Length and Straight Fork Length), # of fish, and gender.

Items 2, 3, and 4 are repeated at the top of the second page and third page. Always complete these blocks.

Page 2 FISH COUNTS. If fish were caught, indicate, by species:

- The number of fish that the angler kept;
- The number of fish released alive;
- The number of fish released dead;
- The number of fish kept that have been or will be sold.

See Section 2.2.5 Item 30 for more details on filling out pages 2 and 3 of the LPHS questionnaire (follow same procedures for recording catch and lengths as for LPIS).

3.2.3 LPHS Assignment Summary Form

LPHS interviewers must fill out an ASF similar to the one used for LPIS assignments (see 2.2.7 ASF). The LPIS ASF may need slight modifications for the LPHS. Interviewers conducting

LPHS assignments must get the headboat captain to initial the bottom of the ASF after the trip is over to verify they conducted the assignment.

3.3 LPHS Field Personnel Requirements

The Contractor shall coordinate with NMFS in reviewing and revising, if needed, written LPHS procedures for inclusion in the manual to be used in training LPIS interviewers. These procedures shall be developed from the procedures outlined in this statement of work, as well as from further modifications of procedures to be provided by NMFS. The LPHS section of the training manual shall be subject to review by NMFS. The final manual must be prepared at least two weeks prior to the start of data collection.

The Contractor shall be responsible for recruiting, hiring, and training the at-sea interviewers for the LPHS. LPHS interviewers must go through the basic training provided to all LPIS interviewers. In addition the training of LPHS interviewers shall include, but not necessarily be limited to the following:

- An introduction to the objectives, goals, and operation of the LPHS.
- A detailed explanation of procedures for collecting headboat catch data and interviewing headboat captains during boarded trips.
- A detailed explanation of the proper procedures for coding and editing responses on the LPHS questionnaire/coding form.

All manuals, presentations, handouts and other materials used by the Contractor for LPHS training shall be submitted to NMFS prior to implementation and are considered deliverables under this contract.

3.4 Quality Control of LPHS Data

All interviewers conducting their first LPHS assignment should be accompanied by their Field Supervisor.

The Contractor is required to conduct follow-up telephone interviews to validate 25% of all the LPHS completed interviews obtained. Activities specific to proper conduct of telephone validations for the LPIS include:

- Development of an LPHS telephone validation questionnaire.
- Select 25% sample for validation. Procedures for selecting validation sample should follow those for validating LPIS interviews (see 2.4.1 above).
- Dialing and contacting headboat captains or designated proxies within 1 week of the date of the assignment.

- Conducting a validation interview to determine if an LPHS assignment was conducted at the specified site on the specified date and to determine whether or not the interviewer conducted themselves in a professional manner according to specified procedures.
- Tracking and reporting of progress in completing follow-up telephone validation of LPHS assignments.
- Make accessible to NMFS the ability to silently monitor LPHS telephone validations from a remote location.

Data collected in the telephone validation interviews should be reported to NMFS in the monthly report. Monthly reports should include:

- The number of LPHS validation interviews obtained by state and interviewer code;
- the number of validations attempted by state and interviewer code;
- an explanation of any interviews that did not validate initially or did not validate at all.

Interviews that do not validate initially should be investigated immediately by the Contractor to determine why the interview did not validate. If the Contractor still cannot validate the assignment he/she should contact NMFS immediately and explain the situation. Any problems or complaints reported by headboat captains associated with the LPHS should be brought to NMFS attention and documented in the monthly reports.

3.5 LPHS Reporting Requirements

As part of the LPIS monthly reports (see 2.6.1 above) the Contractor shall prepare and deliver a section on the results of the LPHS. This section shall cover the results of all LPHS sampling efforts for a given month and shall be delivered to NMFS by the 28th day of the following month. The reports should provide detailed presentations of the work involved to facilitate completion of the survey and the results. The report shall include but shall not necessarily be limited to the following tables (with explanatory text):

- Disposition of all LPHS assignment drawn by state. Dispositions should include assignments completed, sold out, refused, cancelled, or unable to contact captain.
- Summaries of selected variables showing means for hours fished, number of anglers and number of lines fished and frequency distribution for target species.
- Summary of the output from error checking programs run on LPHS data. Tables should include the following fields by state and interviewer code: total completed assignments, number and percent of assignment records with errors traced to form, number and percent of records with errors traced to OCR or data entry, number and percent of records corrected, number and percent of records deleted. High error rates (either field related or home office related) should be explained in the text.
- Catch summary table for select species showing the following by state.
- Number kept, released alive, released dead, sold, measured, minimum and maximum lengths. Species to include are: bigeye tuna, albacore, yellowfin, skipjack, bluefin tuna

by size category, white marlin, blue marlin, dolphinfish, swordfish, little tunny, and Atlantic bonito.

- Results of telephone validations of LPHS assignments.

In addition to the tables above, the report should include a “recommendations” section proposing changes and improvements to the LPHS based on prior experience. This includes plans to improve the validity of LPHS catch rates, enhance participation and cooperation of captains, and increase the visibility and usefulness of the LPHS to the public.

As part of the LPIS annual report, the Contractor also shall prepare and deliver a section on the results of the LPHS. The section shall cover the entire LPHS sampling effort and be delivered to NMFS by December 31st of each survey year. The content of the annual report section should be similar to that outlined above for the monthly reports, summarized across all months of the survey. A description of the LPHS coding and editing procedures, as well as quality control measures, must also be included in the annual report.

3.6 LPHS Data Entry, Editing, and Transmittal

The Contractor shall be responsible for entry of all LPHS data in SAS database format according to specifications supplied by the NMFS (see Appendix B.6, B.7 and B.8 for example LPHS record formats). LPHS variable names, codes and formats should match the LPIS whenever possible. In addition, the Contractor shall be responsible for editing LPHS data as needed to correct possible coding and data entry errors. Every variable recorded shall be checked for possible errors, including checks on range, logic, and reasonableness. The Contractor shall modify the LPIS error checking program as necessary to check LPHS data. The LPHS error-checking program is a deliverable under this contract and shall be provided by the Contractor to NMFS prior to data entry and at the end of each contract year. Error-free files of LPHS data shall be sent electronically to NMFS by the 21st day following each month of data collection.

4.0 Large Pelagics Biological Survey

A supplemental dockside survey may be conducted for the purpose of collecting additional lengths and weights of bluefin tuna and other large pelagic fishes. Data collection for this survey will be independent of the LPIS and the LPHS. The LPBS Contractor shall be responsible for the following activities:

- Contacting marina operators, site managers and fish cleaners prior to the start of the season to establish the data collection system and facilitate cooperation;
- Intercepting captains/mates/owners at weigh stations and/or cleaning stations who have just finished fishing trips for large pelagic fishes;
- Obtaining and recording lengths and weights by species of bluefin tuna and other large pelagic species brought to the station during a 2-8 hour period when most boats return

- from large pelagic fishing trips;
- Recording additional information such as date, site, vessel name, and vessel type.

4.1 LPBS Sampling Tasks

4.1.1 LPBS Sample Frame

The Contractor in consultation with NMFS will review the LPIS MSR and historical LPIS catch data in order to identify sites with frequent catches of bluefin tuna (and other managed species as specified by NMFS) where appropriate weighing and/or cleaning stations are located. The Contractor in consultation with NMFS will develop a LPBS site frame identifying individual sites or clusters of sites to be sampled. The Contractor will work with NMFS to assign weights to each site or cluster as necessary for sampling. The Contractor will also develop a list of all fishing tournaments targeting large pelagics. The tournament list should include the tournament name, location, dates, contact person, species targeted, location of weigh station, number of entries and any other relevant information. NMFS will provide the Contractor with tournament information from the federal highly migratory species tournament registry. The preliminary LPBS site frame and tournament list for the biological sampling shall be completed at least two weeks prior to the start of sampling. Each marina operator in the sub-sample frame will be contacted to identify the best means of obtaining the required data.

4.1.2 LPBS Sample Target Allocations

NMFS will provide the Contractor with target allocations for LPBS assignments by state/month strata at least three weeks prior to sampling. Approximate target sample sizes are provided in the attached pricing sheets.

4.1.3 LPBS Sampling

The Contractor will work with NMFS to develop protocols for LPBS sampling. The assignment schedule will attempt to maximize the number of length and weight measurements for bluefin tuna and other species specified by NMFS. Consideration will also be given to the geographic distribution of assignments across LPS state from Maine through Virginia. LPBS assignments shall cover a 2-8 hour period. LPBS samplers shall not conduct LPIS or LPHS assignments during LPBS assignments. The LPBS assignment schedule will include identified tournaments and randomly selected site cluster/date combinations. Weekend and holiday assignments will be emphasized in order to maximize the number of measurements attained. The Contractor is responsible for ensuring that all drawn assignments are completed. If any assignment could not be completed on its assigned date due to any reason, then it must be rescheduled and completed on the next available date of the same day type.

If a tournament is selected for an LPBS assignment the Contractor's sampler should attend the tournament's captains meeting held prior to the tournament. The sampler should use this as an opportunity to 1) inform tournament captains and organizers of their intent to sample the tournament and 2) discuss the best strategy for sampling the tournament (times, locations etc.).

4.2 LPBS Assignment Procedures

4.2.1 Before the LPBS Assignment

Each LPBS sampler should make sure that he/she knows his/her LPBS assignment schedule and confirm that there are no conflicts with LPIS or LPHS assignments or other work. On each interviewing assignment, the sampler must carry a complete set of all necessary manuals and forms, as well as all needed equipment in useable condition. Prior to the assignment date each sampler should make certain that he/she has all of the required materials and equipment for conducting the LPBS assignment, including:

- Name Tag
- LPIS Procedures Manual
- Fish identification field guide(s)
- Tape Measures – two kinds for measuring straight lengths and curved lengths
- Hand-held fish scale
- Letter from NMFS – a letter on NMFS letterhead that provides a brief description of the LPIS, information required by the Paperwork Reduction Act and the Privacy Act of 1974, and contact information for a NMFS representative (see Appendix E for 2005 example letter)
- LPS brochures and other informational materials that will be provided periodically by NMFS in volumes suitable for wide-spread distribution to all interested respondents
- LPBS Site List with contact information and directions
- LPBS procedures manual
- LPBS Questionnaire/Coding Form (see Appendix K for example from 2000)

4.2.2 LPBS Dockside Sampling Procedures

The Contractor shall work with the NMFS to develop a questionnaire and data collection form to be used for LPBS data collection. The questionnaire/coding form will be similar to the one used for the 2000 LPBS (Appendix K). Wherever possible variables should be coded and formatted the same as for the LPIS. The questionnaire will include, but will not necessarily be limited to, the following data elements:

- LPBS sampler code
- Date

- State
- Site and cluster numbers
- Time
- Tournament (Y/N) and name of tournament
- Vessel name and HMS permit number
- Fishing area
- Water temperature
- Species name and code
- Length (straight and curved) and half girth
- Weight (whole and dressed)
- Gender

The form must be designed such that the vessel name, permit number, fishing area, water temperature, and tournament participation are recorded for each fish sampled.

The following procedures shall be used in obtaining length and weights for all large pelagic species brought to the weighing station:

- Each marina operator shall be contacted prior to sampling to obtain permission to sample at the site and to explain the purpose of the sampling.
- The weigh station operator and/or boat owner/captain/mate must also be asked to allow the sampler to examine, count, and measure all large pelagic species (see Appendix F.1 for species list) brought to the station.
- Information from all large pelagic fish brought to the weigh station shall be recorded. However, NMFS may specify that the Contractor prioritize data collection for certain species (e.g., bluefin tuna) in instances where the interviewer does not have time to weigh and measure all fish.
- Appropriate sub-sampling procedures shall be developed for use when a large number of fish are arriving at the weigh station simultaneously (see 2.2.5 for sub-sampling procedures).
- The LPBS sampler shall record lengths of LPS species according to the same procedures outlined for the LPIS (section 2.2.5 Item 31 and Appendix H). In addition, samplers should measure the half girth of all fish in millimeters.
- LPBS samplers must record fish weights only if: (1) the site has an accurate scale, (2) individual fish are weighed, and (3) the sampler actually sees the fish being weighed. Samplers should record weights to the nearest 0.5 kg in the appropriate box for either whole weight or dressed weight.

4.2.3 LPBS Assignment Summary Form

LPBS interviewers must fill out an ASF similar to the one used for LPIS assignments (see 2.2.7 ASF). The LPIS ASF will need to be modified for the LPBS. Interviewers conducting LPBS

assignments must get the weigh station operator or fish cleaner to initial the bottom of the ASF to verify they conducted the assignment.

4.3 LPBS Field Personnel Requirements

The Contractor shall develop written LPBS procedures for inclusion in the manual to be used in training LPIS interviewers. These procedures will be subject to NMFS review and approval. These procedures shall be developed from the procedures outlined in this statement of work, as well as from further modifications of procedures to be provided by NMFS. The LPBS section of the training manual shall be subject to review by NMFS. The final manual must be prepared and delivered at least two weeks prior to the start of data collection.

The Contractor shall be responsible for recruiting, hiring, and training LPBS samplers. LPBS samplers must go through the basic training provided to all LPIS interviewers. In addition the training of LPBS samplers shall include, but not necessarily be limited to the following:

- An introduction to the objectives, goals, and operation of the LPBS.
- A detailed explanation of proper procedures for the use of field guides and taxonomic keys to accurately identify fish species to the species level of classification and to identify the sex of certain species.
- A detailed explanation of procedures for collecting lengths, girths and weights of large pelagic fish and for calibrating hand-held scales.
- A general discussion of the principles and techniques involved in randomly sub-sampling fish for measurements.
- A detailed explanation of the proper procedures for coding and editing responses on the LPBS questionnaire/coding form.

All manuals, presentations, handouts and other materials used by the Contractor for LPBS training shall be submitted to NMFS prior to implementation and are considered deliverables under this contract.

All interviewers conducting their first LPBS assignment must be accompanied by their Field Supervisor. The Contractor shall have Field Supervisors conduct quality control site visits of samplers on LPBS assignments on at least 10% of the assignments conducted by each sampler.

4.4 LPBS Reporting Requirements

As part of the LPIS monthly reports (see 2.6.1 above) the Contractor shall prepare and deliver a section on the results of the LPBS. This section shall cover the results of all LPBS sampling efforts for a given month and shall be delivered to NMFS by the 28th day of the following month. The reports should provide detailed presentations of the work involved to facilitate completion of

the survey and the results. The report shall include but shall not necessarily be limited to the following (with explanatory text):

- Disposition of all LPBS assignment drawn by state. Dispositions should include assignments completed, cancelled, refused, or other.
- Summary tables and graphs showing the number of length and weight measurements obtained by month, state, site/cluster, species (or size category for bluefin tuna).
- Summary tables and graphs of length (curved, straight, and girth) and weight measurements by month, state, and species.
- Summary of the output from error checking programs run on LPBS data. Tables should include the following fields by state and interviewer code: total completed assignments, number and percent of assignment records with errors traced to form, number and percent of records with errors traced to OCR or data entry, number and percent of records corrected, number and percent of records deleted. High error rates (either field related or home office related) should be explained in the text.
- Summary of results of the LPBS quality control field visits conducted by Field Supervisors.

In addition to the tables above, the report should include a “recommendations” section proposing changes and improvements to the LPBS based on prior experience. This includes plans to improve the validity and representativeness of LPBS measurements, enhance participation and cooperation of captains and weight station managers, and increase the visibility and usefulness of the LPBS to the public.

As part of the LPIS annual report, the Contractor shall prepare and deliver a section on the results of the LPBS. The section shall cover the entire LPBS sampling effort and be delivered to NMFS by December 31st of each survey year. The content of the annual report section should be similar to that outlined above for the monthly reports, summarized across all months of the survey. A description of the LPBS coding and editing procedures, as well as quality control measures, must also be included in the annual report.

4.5 LPBS Data Entry, Editing, and Transmittal

The Contractor shall be responsible for entry of all LPBS data in SAS database format according to specifications supplied by the NMFS. LPBS variable names, codes and formats should match the LPIS whenever possible. In addition, the Contractor shall be responsible for editing LPBS data as needed to correct possible coding and data entry errors. Every variable recorded shall be checked for possible errors, including checks on range, logic, and reasonableness. The Contractor shall modify the LPIS error checking program as necessary to check LPBS data. The LPBS error-checking program is a deliverable under this contract and shall be provided by the Contractor to NMFS prior to data entry and at the end of each contract year. Error-free files of LPBS data shall be sent electronically by to NMFS by the 21st day following each month of data collection.

5.0 Catch Card Census for Highly Migratory Species

The Large Pelagics Survey (LPS) was designed as a specialized survey that focuses specifically on the recreational fishery directed at large pelagic species. However, for certain rare event large pelagic species additional catch data are needed for fisheries management purposes. NMFS currently has a rule that requires mandatory reporting of all landed blue marlin, white marlin, sailfish, Atlantic bluefin tuna, and swordfish through either telephone call-in systems or other state sponsored, NMFS approved programs such as catch cards. Large pelagics catch card programs are currently being conducted by state marine resource agencies in North Carolina and Maryland with funding and technical support from NMFS. Catch Card Census (CCC) programs satisfy the NMFS mandatory reporting rule and provide supplemental catch information. When used in combination, the two programs (LPS and CCC) will complement each other and generate better data with which to manage important large pelagic recreational species. The CCC should have the added benefit of promoting angler awareness, participation and “buy-in” into the management of large pelagic species.

This SOW addresses the conduct of a pilot catch card census program in Virginia. Although similar data collection programs have been in existence in Maryland and North Carolina for several years, this is still considered a pilot study since a large pelagics CCC program has never been conducted in Virginia or by a federal contractor. Further expansion to other states may follow as a modification to this contract. For purposes of data collection consistency this SOW closely matches the protocols established for the North Carolina and Maryland card catch programs. The basic design for CCC programs will require mandatory reporting of certain recreationally landed highly migratory species (HMS). The highly migratory species included in the CCC program are: blue marlin, white marlin, sailfish, Atlantic bluefin tuna, and swordfish. For purposes of this document these five species will be referred to as CCC species. To ensure collection of census data, the following measures will be utilized:

- Captains or operators of permitted vessels will be required to complete a catch card to be submitted at a reporting station in exchange for a landing tag. A catch card must be submitted for each individual fish landed. Catch cards will be widely available at marinas, state marine resource agencies, large pelagic species tournaments, and other sources. The operator of the permitted vessel will be responsible for the proper completion of the catch card.
- All five CCC species (listed above) that are landed recreationally must have attached a landings tag prior to removal from the vessel. Trailered vessels with CCC species on board may not be removed from the water until all the fish are tagged. Any off-loaded CCC species observed without an attached landings tag will indicate a violation.
- Anglers arriving at the dock after hours (i.e. after reporting stations have closed) and therefore cannot get landings tags are instructed to call a 1-800 number to report their CCC species landings or visit a nearby self-serve catch card kiosk.
- NMFS will establish appropriate rules or processes to implement the procedures noted

above and further described below.

5.1 General Requirements

5.1.1 Cooperative Outreach and Education

Information delivery and education will be a critical component for the success of this program. The Contractor will work with all project participants to use whatever outreach mechanisms they have to inform HMS fishery participants of the reporting requirements contained in this proposal. The Contractor will work with NMFS and the appropriate state agencies to implement cooperative outreach activities to ensure that affected anglers and businesses are aware of this project and its potential benefits. Under this requirement, the contractor will perform the following tasks:

- Work with NMFS on a CCC program description for public distribution.
- Send a notice about the catch card census by mail to HMS permit holders prior to the start of the program. The notice, which will be approved by NMFS, will include a description of the program, the program's objectives, and a list of official CCC reporting stations in the permit holder's state of residence. NMFS will provide the list of permit holders names and addresses for this mailing. Notices will be sent to permit holders in the state(s) covered by this option. Notices may also need to be sent to HMS permit holders in nearby states if a substantial number of these out-of-state anglers land CCC species in the state(s) covered.
- Work with state marine resource agencies and NMFS on agency issued news releases.
- Contact media and provide the program description.
- Develop and maintain a list of CCC reporting stations (see 5.1.2 below for more detail).
- Utilize contractor port agents to inform fishing industry members and other stakeholders about the program.
- Work with states and NMFS to place program information and landings results on official agency websites.
- Design, produce, and distribute posters with reporting requirements, reporting station and kiosk locations, information about the after hours hotline, and how to obtain additional information.
- Establish other means of educational outreach as necessary and with NMFS and state agency input and approval.

5.1.2 Establish Reporting Stations

The Contractor will work with NMFS, the appropriate state agencies, and HMS recreational fishing industry representatives to establish reporting stations in close proximity to all sites where CCC species are landed throughout the program area. The reporting stations will be responsible for collecting catch cards and distributing tags for compliance purposes. All of the

key marinas will be contacted to participate in the tagging program. The reporting station list is a deliverable under this contract and should be updated as necessary throughout the contract period. Reporting station lists should include contact persons, phone numbers, addresses and directions. Stations will include marinas, tackle shops, and other fishing centers. The Contractor will use public relations and outreach techniques to elicit the cooperation of these sites in the collection of catch cards and distribution of NMFS CCC tags. The Contractor will work with NMFS and the appropriate state agencies to develop a written cooperative agreement between NMFS, the state agency and the CCC reporting stations. As part of the outreach effort, the Contractor will get all CCC reporting stations to sign this agreement and will return all original, signed documents to NMFS. Contractor port agents will take every opportunity to remind the people working at reporting stations of the importance of this program and the need to collect accurate and thorough information. The Contractor will design a catch card drop-box and deliver one to each reporting station prior to the start of the program. Catch card drop-boxes will become property of NMFS after the contract period is over.

HMS tournaments should also be contacted for participation and a separate list of HMS tournaments should be maintained. Prior to HMS tournaments, Contractor port agents will attend the tournament's captains meeting to promote the CCC program and emphasize the need for accuracy in reporting all CCC species landings via the catch cards. The HMS tournament list is a deliverable under this contract and should be updated as necessary throughout the contract period. NMFS will provide the Contractor with a list of federally registered HMS tournaments to be used as a starting point in development of the tournament list. The Contractor's port agents and tournament liaison will also function as mobile reporting stations as needed, as well as keeping other reporting stations supplied with catch cards and landings tags.

At more remote sites where CCC species are landed the nearest marina or tackle shop may be too far for anglers to be expected to travel for a landings tag. In such cases the Contractor will need to establish catch card kiosks or other suitable self-serve reporting stations. The Contractor will work closely with NMFS and state agencies in the design and location of any self-serve reporting station. Implementation of self-serve catch card reporting stations will be subject to approval by NMFS and the state agency.

5.1.3 Catch Card Development

The Contractor will be responsible for development and printing of catch cards to be distributed to the reporting stations. Catch cards will be designed to facilitate reporting of CCC species. The catch card design must be as user-friendly as possible and require a minimum of time for completion. Only those data relative to reporting compliance with the landing and tagging program will be included. Catch cards can be provided to vessel operators in advance or obtained from the reporting stations and other authorized agents. Catch cards should be designed so that they include a written perforated receipt given to the angler that can be matched by identification number to the catch card and the fish tag. Listed below are the mandatory data elements to be included on the catch cards:

- Reporting station identification (station number and name)
- Date of landing
- Landing tag number
- Atlantic Tunas or HMS permit number
- Vessel name and type (Charter/Private/Headboat)
- Length in inches of CCC species landed (curved fork length for tuna, and lower jaw fork length for billfish)
- Tournament participation
- CCC species landed
- Fish weight will also be recorded by the angler when available

An example of a catch card used to collect HMS landings information in North Carolina is provided as Appendix L. The Contractor may be requested to produce two different catch cards; one for Atlantic bluefin tuna and one for the four species of billfish.

5.1.4 Distribution of Landings Tags

Landings tags for CCC species will be non-reusable and very similar to those used previously to identify CCC species landed recreationally in North Carolina and Maryland. Each tag will have a unique I.D. number that will be recorded onto the catch card. The Contractor will supply and distribute tags to reporting stations and will account for each tag as it is distributed, as it is used, and at the end of the season, maintaining these data in a spreadsheet or SAS dataset. Reporting station contacts will be asked by Contractor port agents to fill out a tag verification form (developed by NMFS) verifying receipt of CCC tags. Landings tag distribution will be reconciled with catch card submittals by reporting station and summary data will be provided in the monthly data summaries and in the final project report (see 5.4 below).

5.1.5 Catch Card Data Collection

The Contractor will collect completed catch cards from various reporting stations and kiosks throughout the program area on a weekly basis. To avoid unnecessary and costly travel Contractor port agents are encouraged to call ahead to determine if there are any catch cards to pick up in a given week. When collecting catch cards port agents should make sure reporting stations have an ample supply of cards and tags. Reporting stations will be instructed not to give catch cards to the port agent without first checking their Contractor issued identification badge.

Contractor port agents will also need to spend some time at the various reporting stations during periods of high HMS fishing activity and during tournaments targeting CCC species. During such times agents will be expected to assist with the program, speed up the tagging process to reduce vessel backups, answer questions about the program, and perform other program related tasks as necessary.

5.1.6 After Hours Reporting Hotline

Some vessels with CCC species landings may return to the dock after all nearby reporting stations have closed for the day. To capture landings information from such vessels NMFS or the state agency may establish a toll free number for anglers arriving at the dock after hours to report their landings. This method of reporting is restricted to after hours landings only. Information obtained will match that obtained on the catch card. The Contractor will be given access to call-in data for purposes of incorporating these observations into the catch card database. The Contractor will also work with NMFS and the appropriate state agencies to establish kiosks where anglers can obtain, fill out and deposit catch cards after hours (landings tags will not be distributed at kiosks).

5.2 Catch Card Census Personnel Requirements

The Contractor will develop written Catch Card Census procedures for training of catch card port agents. These procedures shall be developed from the procedures outlined in this statement of work, as well as from further modifications of procedures to be provided by NMFS. Catch Card training materials will be subject to review by NMFS and must be delivered at least two weeks prior to the start of data collection.

The Contractor shall be responsible for recruiting, hiring, and training Catch Card Census port agents. Contractor port agents participating in the program will be trained to identify CCC species as well as other highly migratory species (HMS) caught in their area. Port agents should also be knowledgeable about HMS fisheries in their area and stay current with HMS regulations. The training of port agents shall include, but not necessarily be limited to: 1) An introduction to the objectives, goals, and operation of the Catch Card Census program, and 2) A detailed explanation of procedures and tasks associated with the Catch Card Census program, as outlined in this SOW. All manuals, presentations, handouts and other materials used by the Contractor for Catch Card Census program training shall be submitted to NMFS prior to implementation and are considered deliverables under this contract.

5.3 Quality Control of Catch Card Census Data

Based on initial inspection of the collected catch cards, some may be found to be incomplete, contain inconsistencies or be filled out incorrectly by HMS anglers. In other cases the information on the catch cards may be inconsistent with information from the NMFS HMS permit list. In such instances the Contractor will attempt to contact the angler by phone using the HMS permit holder list provided by NMFS (assuming the HMS permit number is written on the catch card and can be linked to a phone number on the list). In order to minimize recall bias, anglers with incomplete catch cards should be contacted within three weeks from the time the catch cards were collected from the reporting station. A minimum of ten contact attempts should be made to reach such anglers on the phone. Disposition of catch card information validation

calls and results of completed calls should be included in the monthly and annual project summary reports delivered to NMFS.

5.4 Catch Card Census Reporting Requirements

As part of the LPIS monthly reports (see 2.6.1 above) the Contractor shall prepare and deliver a section on the results of the Catch Card Census (CCC) program. This section shall cover the results of all CCC data collection efforts for a given month and shall be delivered to NMFS by the 28th day of the following month. The CCC section should provide detailed presentations of the work involved to facilitate completion of the CCC and the results. The CCC report shall include but shall not necessarily be limited to the following:

- Summaries of harvest data at the state, boat type, reporting station and species (size category for bluefin tuna) level. Harvest data summaries should also include tables comparing tournament versus non-tournament landings at the state, month and species level.
- Length frequencies for each species at the state/month level of analysis.
- Summary of the disposition of catch card information validation calls for incomplete and inconsistent catch cards (see item 5.3 above) and resolution of questionable fields.
- Summary of landings tag distribution by tag number and reporting station.
- Updated list of reporting stations by state.
- Summary of the output from error checking programs run on Catch Card Census data.
- Detailed discussion of any problems encountered in collecting catch cards, establishing reporting stations or performing any other tasks essential to the success of this program.
- Recommendations for future improvements to the CCC program.

As part of the LPIS annual report, the Contractor also shall prepare and deliver a section on the results of the Catch Card Census program. The section shall cover the entire CCC data collection effort for a given year and shall be delivered to NMFS by December 31st of each survey year. The content of the annual report section should be similar to that outlined above for the monthly reports, summarized across all months of the program.

5.5 Catch Card Census Data Entry, Editing, and Transmittal

Catch card data will be key-entered into error-free SAS datasets by the Contractor according to the format provided in Appendix B.9. Error-free catch card data shall be sent electronically to NMFS by 5:00 PM on the 21st day following each month of data collection. All computer software developed for the entry and/or checking of Catch Card Census data shall become the sole property of NMFS and shall be delivered to NMFS upon completion of each contract year. The Contractor shall provide copies of such software for NMFS review, evaluation, and approval prior to implementation. Any revisions of such software shall also be submitted for NMFS review, evaluation, and approval prior to implementation.

In addition, the Contractor shall be responsible for editing Catch Card Census data as needed to correct possible coding and data entry errors. The Contractor shall develop well-documented SAS programs to check all variables in the standard SAS datasets for possible errors. Every variable shall be checked for possible errors, including checks on range, logic, and reasonableness. Any coding or data entry errors identified as a result of the checking process shall be corrected by development of well-documented SAS error-correction programs. Copies of all checking and error-correction programs developed by the Contractor shall be delivered to the NMFS along with the error-free SAS datasets.

5.6 Catch Card Census Deliverables

Catch Card Census Deliverable	Schedule
Brief CCC program description for public dissemination	At least one month prior to field implementation
Outreach letter to HMS permit holders	At least one month prior to field implementation
Reporting station cooperative agreement forms	At least one month prior to field implementation
Complete list of CCC reporting stations	Initially at least one month prior to field implementation; updated monthly
Educational outreach posters	At least one month prior to field implementation
Complete list of HMS tournaments	Initially at least one month prior to field implementation; updated monthly
Catch card design sample and landings tag selection	At least one month prior to field implementation
SAS datasets with key entered, error free, catch card information including after hours hotline data	Monthly, due the 21 st of each month following the month sampled
Monthly reports (part of LPIS monthly reports)	Monthly, due the 28 th of each month following the month sampled
Final annual report (part of LPIS annual report)	Due December 31 st
Catch Cards	Due December 31 st
Catch card drop-boxes	Due at contract termination
Kiosks	Due at contract termination

6.0 Data Confidentiality

All data collected during the performance of this contract shall be considered as “confidential and proprietary.” These data shall be used only for statistical purposes, and will be available in identifiable form only to NMFS and its contractors except as otherwise required by law. All requirements of the Privacy Act of 1974 (P.L. 93-579) concerning the collection and use of identifiable information for individuals shall be observed. Any release of data to any individual or organization shall be subject to review and prior approval by the Contracting Officer and the NMFS. All copies of the application forms shall be returned to the NMFS or destroyed at the COTR's direction upon completion of the survey.

All Contractor personnel (office and field) are required to read the NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics, and sign a statement of non-disclosure (see Appendix M). The Contractor must provide copies of the signed statements to NMFS on an

agreed-upon schedule. Proposals must address security measures to limit and/or control access to the data.